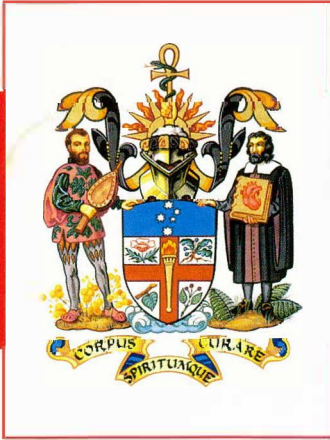


Australian and New Zealand College of Anaesthetists

ABN 82 055 042 852

Joint Faculty of Intensive Care Medicine
Faculty of Pain Medicine



Bulletin

*'To serve the community by fostering safety and quality patient care
in anaesthesia, intensive care and pain medicine'*

Inside

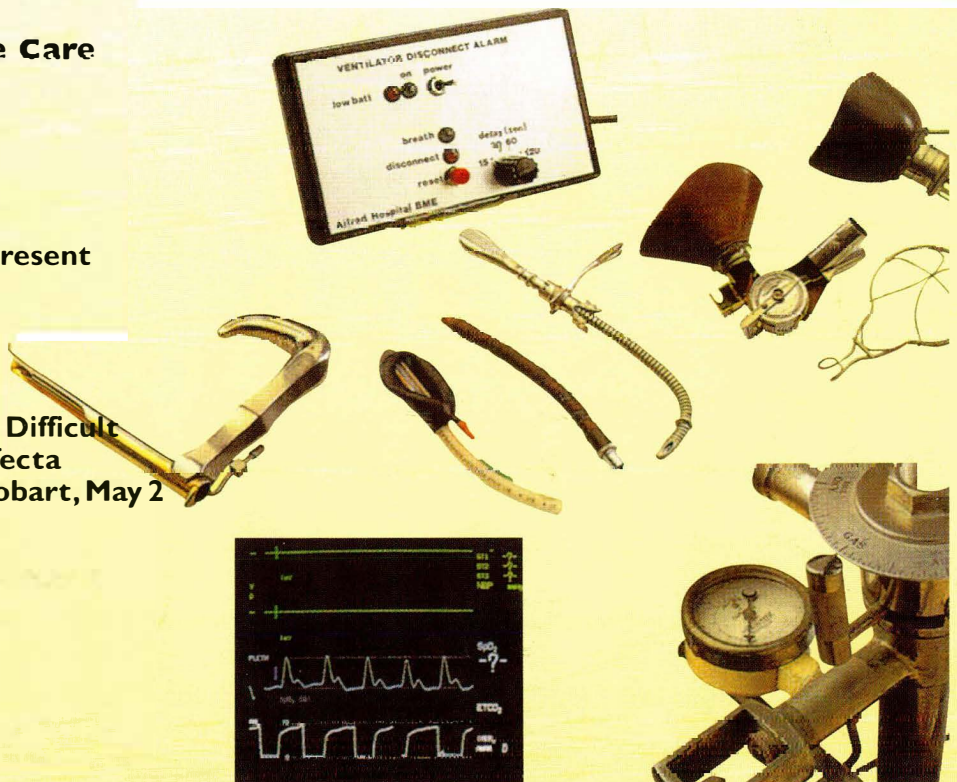
- President's Message
- Law Report – Trainees – Care and Safety
- Revised FANZCA Implementation
- PNG – Anaesthesia, Intensive Care, Pain Medicine – A New Era

Joint Faculty of Intensive Care Medicine

- Dean's Message
- Training Program Review
- Regulation – Eligibility to Present for Examination

Faculty of Pain Medicine

- Dean's Message
- Pain Management in a Difficult Case of Osteogenesis Imperfecta
- Refresher Course – Hobart, May 2



Volume 12

Number 1

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Contents

Page	
1	President's Message
2	Deaths, Council Citation
2	Honours and Appointments
3	Law Report – Trainees – Care and Safety
5	Revised FANZCA Implementation
6	Admission by Examination
7	Highlights from Council Meeting
9	General Practitioner Anaesthetists and JCCA
10	PNG – A New Era Begins
11	MOPS Returns
12	New Fellows' Conference 2003
13	Library Report
14	Staff Profile – Helen Shanks
15	Undergraduate Prizes
15	Foundation Donations
15	HELP Modules 2003
16	Education Report
17	OTS Performance Assessment
18	SIG – CVP Annual Report
20	Letter to the Editor

Joint Faculty of Intensive Care Medicine

21	Dean's Message
22	Amendments to AI and Regulation 12.4
23	Items of Interest
24	Examination Dates
25	ASM Report – J. Myburgh
25	Admission to Fellowship
26	Review of I.C. Training Program
28	Appointment of Supervisors
28	Policy Documents Index

Faculty of Pain Medicine

41	Dean's Message
42	Admission to Fellowship
43	Highlights from Board Meeting
45	Pain in Difficult Case of Categories Imperfecta
52	Professional Documents Index
53	ANZCA Training Scholarship
	Obituaries
55	Emmanuel M. (Manny) Papper
57	Michael J. Bookallil
58	Henry M. Bray, Graeme A. Donaldson
59	Edwin R. Fawcett
60	Peter J. Forgan, Ronald J.H. Japson
61	Future Meetings
	Professional Documents
67	PS39 Minimum Standards for Intrahospital Transport of Patients
70	PS3 Guidelines for Management of Major Regional Analgesia
73	PS48 Statement on Clinical Principles for Procedural Sedation
76	Anaesthesia Enhancement Grant 2003

Editorial

Mrs Joan Sheales, Editor
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Dr R.S. Henderson
Dr R.N. Westhorpe
Mr E. Dean

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President's Message

Richard J Willis, ANZCA

A younger Fellow asked me recently why the College does not do more to promote a positive image for anaesthetists. As with many Fellows around Australia and New Zealand, I was heavily involved with the National Anaesthesia Days that were held annually in the 90s. This promotional idea was enthusiastically embraced by the profession with a great variety of innovative events taking place not only in hospitals but also in shopping centres and in other places where an interested audience could be guaranteed. There was extensive exposure of anaesthesia, intensive care and pain medicine in newspapers, on radio and on television. After a few years, the enthusiasm began to wane as it did involve a lot of time by those involved and it became increasingly difficult to develop new catchy themes for the event each year. As successful as it was, it became clear that, at least for a time, National Anaesthesia Day needed to be rested. In its place a strategy was developed that included feeding stories to the media in a regular fashion whenever there was a worthy statement to be made. This has occurred.

The question we asked ourselves is: 'What does media exposure achieve?' That is a difficult question to answer. It was my perception that during the period of the National Anaesthesia Days, there was an improvement in the amount of knowledge of the profession in the community, as gauged by the quality of questions received on talk-back radio, but perceptions are notoriously inaccurate. The College media advisor keeps a detailed record of all anaesthesia-related stories in the media - the list is actually quite impressive - but it is still impossible to gauge their real effect. More importantly, does it improve the image of anaesthetists? I suspect it does but I am not sure to what extent.

What I am sure of is that there are other better ways of drawing attention to what we do. A high proportion of

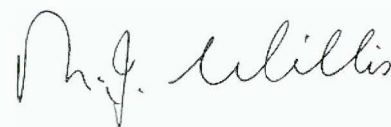
hospital patients utilise the services of an anaesthetist in some way. In terms of client exposure, this is a marketer's dream. Promotion of the specialty is not the preserve of the College, or of the ASA, or of the NZSA; it is the responsibility of ALL anaesthetists in both our countries. If every anaesthetist utilised all the opportunities that become available every day to promote the profession, the value would far outstrip all the good news stories that we could ever produce. Of course, that would take time, a commodity not abundantly available to a busy anaesthetist, but I am sure that we could all contribute more than we do without too great a cost.

Setting a high standard in professionalism is the best way to upgrade the public image of anaesthetists. Professionalism is a word that is difficult to define, but it embodies such issues as sensitive and diligent management of our patients, maintaining our knowledge and clinical skills, concern for our workplace colleagues, maintaining appropriate behaviour in and outside the workplace, attending to the way we present ourselves including our dress, giving our anaesthetised patients our undivided attention, maintaining good humour and generally acting in a manner that commands respect. We recognise poor behaviour in some of our colleagues but we do not always recognise it in ourselves. An unguarded loose comment, a lapse in concentration or an unnecessarily abrupt response can tarnish the image that we are trying to build. If our patients and our colleagues admire what we do and how we do it, then over time, the message will spread. We must earn respect, not demand it.

Finally, I would like to mention a disappointing change in plan that was forced upon the College. Many Fellows would have been aware that, following the very successful Combined Scientific Meeting in Hong Kong, it was planned to hold the 2005 ASM in Kuala Lumpur in association with

our Malaysian and Singaporean colleagues. Following the Bali bombing and the publicised targeting of Western events for further incidents, warnings have been issued by the Australian Department of Foreign Affairs and Trade regarding travel and attendance at large gatherings in several neighbouring countries. The outcome of these ongoing warnings was predicted to result in a very significant decrease in the attendance of Australian and New Zealand delegates at the KL meeting. A decision about the future of the combined meeting had to be made now before planning progressed any further. Regrettably, we decided to defer. For me, this decision was particularly difficult because of my hospital's long and continuing

association with Malaysian trainees, but I believe the decision is a correct one at this time. I have already discussed this personally with the senior anaesthetists in Malaysia and Singapore but would also like to publicly apologise to all our Malaysian Fellows. I sincerely hope that our fears are unfounded and that we can share a combined meeting in the future.



Richard Willis

Deaths

The death of the following Fellows is noted with regret:

Dr John Winter Ashton (Vic) – FFARACS 1969, FANZCA 1992
Dr Michael John Bookallil (NSW) – FFARACS 1961, FANZCA 1992
Dr Henry Michael Bray (Vic) – FFARACS 1957, FANZCA 1992
Dr Robert Love Coulter (NZ) – FFARACS 1960
Dr Choy Tak-Chiu David (HK) – FFARACS 1968, FANZCA 1992
Dr Edwin Robert Fawcett (NZ) – FFARACS 1961, FANZCA 1992
Prof Emanuel M Papper (USA) – Honorary FANZCA 1996
Dr Ronald Justin Henry Tapson (Tas) – FFARACS 1966, FANZCA 1992
Dr John Spencer Windeyer (NSW) – Foundation Member 1952, FFARACS 1956, FANZCA 1992

Council Citation

Council Citation was awarded to Dr Kandasamy Vijayakumar (NT) for his outstanding contribution to anaesthesia services in Alice Springs.

Honours and Appointments:

Dr Bruce Rounsefell (SA) – Member in the Order of Australia (AM), Australia Day Honours
A/Professor José Carvalho (Canada) – Associate Professor of Anaesthesia, University of Toronto, and Director of Obstetric Anesthesia, Mount Sinai Hospital
Professor Stephen (Butch) Thomas (USA) – Marjorie Topkins – Alan Van Poznak Professor of Anesthesiology, Cornell USA



Law Report

Michael Gorton B.Comm, LLB., FRACS (Hon), FANZCA (Hon)
College Honorary Solicitor
Partner – Russell Kennedy, Solicitors

‘Trainees – Care and Safety’

There is much evidence around that junior doctors and trainees are under great pressure arising from the general stress, lack of resources, budget cuts and low morale facing our healthcare system.

The AMA, medical colleges and others have recently undertaken substantial promotion of the “safe working hours” campaign for junior doctors and trainees in public hospitals.

As all medical practitioners will be aware, stress and pressure in the workplace, particularly the hospital environment, can have serious deleterious effects on training and education – quite apart from the personal pressures that young doctors will face affecting their personal lives and health.

Factors affecting stress levels for junior doctors have been identified in a recent report (MJA Vol 177 Supplement, 1 July 2002):

- Nature of the work. Long working hours. Intensity of workload.
- Nature of the working environment.
- Lack of support of medical administration.
- Lack of assistance of nursing staff.

A recent conference (Confederation of Postgraduate Medical Education Councils, July 2001) on this issue indicated that there was general knowledge of these problems, a clear awareness of their effects, but a general lack of coordinated approach by education bodies, hospitals and medical administration to deal with the issues.

A recent study (BMJ 2001; 322: 709-710) indicated additional ethical pressures on medical students, principally:

- Conflict between the requirements of education and patient care.
- Responsibility which exceeded the medical student’s capabilities.
- Sub-standard communication or procedures with patients.

Medical Colleges should therefore consider their own responsibility to deal with these issues – and potential liability if they don’t.

Liability

In many respects, issues involving trainees arise under the employment relationship between the trainee and the hospital. The College’s are indirectly involved through providing training and education. However, for some of the issues discussed in this article, there may be a blurring of liability and responsibility – especially given that College representatives inevitably also sit on the hospital committees or occupy the hospital positions to which the trainees will report during their employment. Because part of the arrangement for training and education by the Colleges involves supervision and mentoring, there is also the possibility that the College’s will have some liability if they do so negligently. The College could be liable for negligently supervising a trainee, by placing the trainee in a position of danger or by allowing or authorising the trainee to carry out work for which they were not competent. Obviously, the extent to which Colleges will be liable will, to some extent, depend on the circumstances of the case.

However, it is clear that the Colleges will need to consider these issues more and more – underlining the nature of the relationship the Colleges have with the training hospitals. There is a need for greater clarity.

It may therefore be important for the Colleges, in their training handbooks and manuals, to clearly identify those areas where the Colleges will have responsibility and those areas where the employing hospitals have responsibility.

Additionally, in some jurisdictions, notably New South Wales and New Zealand, industrial law can also make a training and education authority liable, similar to an employer, for trainees under their control or supervision. The interaction of industrial relations legislation in the trainee relationship therefore produces a complicated mix.

A Safe Working Environment

Under occupational health and safety legislation an employer has the responsibility to ensure that an employee operates within a safe working environment. Obviously, therefore, a training hospital will have a range of policies and procedures dealing with:

- needle stick injuries;
- lifting policy;
- infection control.

There will be a range of other policies dealing with other health and safety issues.

The “Safe Working Hours” campaign identifies the potential stress and health effects of long working hours on doctors and trainees. It is an issue which hospitals (and to some extent, the Colleges), can no longer ignore.

Harassment, Discrimination and Bullying

Employers have an obligation to ensure that they maintain appropriate policies and procedures dealing with sexual harassment, discrimination and bullying.

Because the Colleges will be considered education authorities, complaints of harassment and discrimination can also be made by trainees against supervisors, mentors and other representatives of the Colleges involved in their education and training.

Accordingly it is appropriate that the Colleges also have policies dealing with discrimination, harassment and bullying, covering participants in the training program, and that those policies and procedures be appropriately disseminated and properly implemented.

Contract

One of the legal relationships between trainees and the Colleges is that of “contract”. For a fee payable by the trainee, the College undertakes to provide training and education services.

Accordingly, the initial documents outlining the training program, the training program manuals and materials, and the general correspondence between the Colleges and the trainees, will all form part of the “terms and conditions” of

the contract between the College and the trainee.

The Colleges should therefore be wary about the promises and claims they make in relation to their conduct in the training program. Claims to “fully train” a trainee, or to provide “extensive training and education” sound grand and impressive – but may be hard to live up to if the training program is not as extensive or as all encompassing as those terms might imply.

The Colleges should therefore be careful to state exactly what training and supervision they will provide, and the extent to which trainees are required to undertake their own further education, study and training. Training program manuals should make it clear that a substantial part of the training program is about trainees taking responsibility for their own further education, research, participation in conferences, etc.

In particular, statements about career paths, admission to training programs, progress within the training program, etc should be vetted carefully to ensure that they are strictly accurate. Most training programs now are expressly conducted on a year by year basis, with no guarantee that training will be progressed to the next year, in the absence of clear satisfactory performance. It is important that all documentation relating to the training program is consistent with this principle.

Colleges should ensure that supervisors of training are themselves “trained” as supervisors, and made aware of the expectations of them in acting as supervisors, trainers and mentors.

Patients and Informed Consent

It is difficult to envisage that a College would have liability in the event that a trainee were negligent in the treatment or care of the patient.

However, the Colleges are not only responsible for their own negligence, but also the negligent acts and omissions of their “agents”. In some cases the supervising Fellow may be considered an “agent” of the College, although this will depend on the circumstances. It would need to be clear that

the Fellow was acting as supervisor as a College representative, and not as supervisor representing the hospital/employer.

Nonetheless, the supervisor could certainly have a claim against him or her in the event that it was shown that he or she negligently supervised the trainee – by failing to supervise properly, or allowing the trainee to carry out procedures beyond their level of competence.

In addition, as I have previously reported, the issue of “informed consent” in relation to trainees carrying out procedures is a matter to be reviewed by hospitals and Colleges. Where a trainee is to carry out a procedure, (whether under supervision or not) it may clearly be material to a patient that they be informed that the trainee will carry out the procedure, rather than the supervising doctor, as the patient may have anticipated. (A copy of this paper is available upon request from the author: mgorton@rk.com.au).

Procedural Fairness

Because of the nature of the training program, and the impact on the careers of trainees, the Colleges must observe the requirements of “natural justice” or “procedural fairness” in the way that they deal with them. This applies to:

- the selection process;
- decisions on progress of trainees – particularly unsatisfactory progress decisions;
- disciplinary action;
- removal or expulsion from the training program.

The Colleges must act without bias, with adequate notice of the issues to trainees – particularly notice of material adverse to the trainee. The Colleges must give due notice and allow trainees an opportunity to respond to criticisms or adverse material.

It is therefore important that the Colleges have established appropriate processes, and clearly documented pathways for dealing with all of these issues. A separate paper on the issues of “natural justice” for College committees has previously been written by the author (available from: mgorton@rk.com.au).

Impaired Doctors

Colleges should also have appropriate policies dealing with trainees who may be or become impaired during the training program. The various Medical Boards now have clear pathways dealing with impaired practitioners and it is appropriate that the Colleges either utilise these processes or have their own processes in place to deal with trainees in these circumstances.

It is not sufficient to merely deal with poor performance or unsatisfactory process, but also issues relating to any general physical or mental impairment, which may be impacting.

General

There are a range of issues affecting the relationship between the trainee and the Colleges. There is a need for greater clarity between the responsibilities of the Colleges and those of the employing hospitals. At present the “blurring” of those responsibilities represents an unnecessary risk to both.

In any event, the issue of safety in the workplace, particularly safe working hours, needs to be addressed. The Colleges have an interest in ensuring this issue is addressed.

Admission to Fellowship by Examination

The following were admitted to Fellowship:

Nicola Jane ACWORTH	QLD	Joyce May Lin LIEW	NSW
Constantine Efthimious ANTONIOU	VIC	Stephen John LIGHTFOOT	NSW
Gregory Willoughby BAKER	WA	Huey Sing LIM	HK
Dieter BERENS	QLD	David Tuc Hwai LIM	HK
Anthony James BERGIN	QLD	Ean Huei LIM	NSW
Craig Walter BIRCH	NZ	David Kenneth LINSKOTT	VIC
Catherine Marcia BROOKSBANK	QLD	Kristian Kai LUNDQVIST	NSW
Neil William BROWN	NSW	Anthony Peter McDOUGALL	QLD
Margaret Mary BUCKHAM	NSW	Carmel Anne McINERNEY	NSW
Antonio Luciano CARROZZI	NSW	Martin John McNAMARA	QLD
Jason Edwin CHAFFER	NSW	Paul Mario MEZZAVIA	VIC
Derek CHAN LIM SUN	NSW	James Alexander MITCHELL	USA
Eu-Han CHIN	NSW	Attila Karoly NAGY	NSW
Brian Shaune COWIE	VIC	Stephan Peter Willi NEFF	SA
Tyron Robert CROFTS	VIC	David William NEMETH	SA
Grant Richard DEVINE	ACT	Ronald PANG	WA
Paul James DUNKIN	NSW	Kevin PARRY	SA
Kerry Lee ENGLISH	NZ	Gavin George PATTULLO	NSW
Douglas James FAHLBUSCH	SA	David John PROBERT	QLD
Lawrence Tak Yan FAN	NSW	Anne RASMUSSEN	NSW
John Grant FARIS	NZ	Alan Bruce ROUSE	TAS
Cesar Henry FERNANDEZ-CORNEJO	NSW	Jamie Douglas SALTER	WA
Sai Choon FONG	QLD	Christopher William SCARFF	VIC
Nadia Jane FORBES	NZ	Claire Louise SERVICE	NSW
Dale Cameron GARDINER	QLD	Roslyn Olive SHAW	QLD
Cameron Bruce GOURLAY	TAS	Jonathan Mathew SHIRLEY	QLD
Hamish David GRAY	UK	Robert Henry SOLLY	VIC
Janine Ruth GREGSON	NSW	Thomas James STUDHOLME	NZ
Kate Eliza HILLIER	UK	Sai Tsz SUEN	HK
Ki-Ling HUI	HK	Siew Ching TAN	Malaysia
Nicholas Victor IGNATENKO	NSW	Frank Neville THOMAS	NZ
Justin James IMRIE	NZ	Elizabeth Louise TRENT	WA
Anne Veronica JAUMEES	NSW	Andrew Graham USHER	Canada
Kishore Nanda JAYANTHI	NSW	Anthony Wayne VULCAN	VIC
Simon Alan JENKINS	SA	Vivien Linda WALSH	NSW
Alison May KIRKMAN	NZ	David John Campbell WARE	VIC
Fung Kwai KWOK	HK	Deborah Shan Boughay WATSON	NZ
Jennifer Susan LAIN	WA	Jason WELLS	WA
John Francis LAMBERT	NSW	David Christopher WILLIAMS	SA
Bernard Hua-San LEE	WA	Karen WONG	NZ
Helen Alice LEGGETT	NSW	Bevan YEE	NZ
Mark Joseph LENNON	WA	Alex Sow Nam YEO	Singapore
Ching Fan Carina LI	HK	Amir Roland ZIMMERMANN	QLD

Highlights from the Council Meeting

FEBRUARY, 2003

ELECTION OF PRESIDENT

Dr Richard Wills was re-elected College President to continue in this office until May 2004.

EDUCATION AND TRAINING

Trainee Support Kit

Following a number of revisions, the amended document may be viewed on the College website.

Revised FANZCA Training Program

Council resolved that the revised FANZCA Training Program will commence for all trainees at the beginning of the 2004 hospital year and will apply to all trainees at all levels of training. Trainees commencing anaesthetic training at the commencement of the 2004 hospital year will complete the full training program whilst current ANZCA trainees will be exempt from parts of this program, depending on their current level of training. Explicit details of the transitional requirements will be forwarded to all trainees when available. The College recognises that changes to training can be unsettling and, therefore, trainees must be reassured that it is College policy that trainees are not disadvantaged as a result of any changes to the training program.

The Chair of the Education and Training Committee will convene a teleconference with the Regional/National Education Officers, scheduled for Monday, 17 February at 6.00pm AEDST. The College will fund the participation of all Directors of Departments and Supervisors of Training in workshops within their Regions for the purposes of explanation and guidance.

Recognition of Supervisors of Training

Council agreed that Supervisors of Training in Anaesthesia who have served in a post for five years or longer be recognised by the presentation of a Certificate to be presented by the relevant Regional/National Committee. The award of such Certificate will be made retrospectively.

Trainees with Problems – Educational Module

The educational module "Trainees with Problems" has been approved and is included in the Supervisor of Training Support Kit. These updated Kits have been despatched to all Supervisors of Training

Trainee Representation on ANZCA Education and Training Committee

In order to facilitate the input of Trainees' views into the decision making of various College Committees, Council resolved that:

1. There be one Trainee representative on the Education and Training Committee.

2. The Trainee's tenure should be one year.

3. The Trainee's role on the Committee is to bring a Trainee perspective to matters being discussed and bring concerns that the body of Trainees may have with their training.

4. The Trainee should be selected by each Region/New Zealand in rotation by ACT, New South Wales, New Zealand, Queensland, South Australia/Northern Territory, Tasmania, Victoria, Western Australia.

5. The trainee selected should be a more senior trainee.

New Fellows' Representation on the ANZCA Education and Training Committee

Council resolved that:

1. Each New Fellows' Meeting selects a representative who will attend the Education and Training Committee for the following year.
2. The New Fellow will participate in the Education and Training Committee to report on the recommendations from the New Fellows' Meeting, participate in any actions flowing from those recommendations and bring a New Fellows' perspective to any discussion at the Committee.
3. The tenure for the New Fellow will be one year, although the Committee will have the power to co-opt this Fellow for another year if necessary, in which case the Committee will have two New Fellows.

EXAMINATIONS

Mobile Telephones

Council resolved that at the oral examinations, mobile telephones must be turned off from the time the candidates are signed in and cannot be turned on again until the quarantine period has been completed and they have left the examinations area.

Examination Questions

Type K questions will be removed from the MCQ Bank and only Type A questions will be used in the Final Examination in the future.

Publication of Examination Papers

Council resolved that as from May 2003 the entire MCQ paper from two years previously will be published after each examination with the appropriate caveat.

Medical Clinical Vivas

As from January 2003 Medical Clinical Vivas will be conducted solely by Anaesthesia Examiners.

Patient Consent

Council has approved a Participation Form to be completed by patients involved in the Final Examination, together with a Patient Information Sheet.

Overseas Trained Specialists – Clinical Assessment

Overseas Trained Specialists assessed by the College on behalf of the Australian Medical Council for purposes of registration in Australia are required to complete their clinical assessment period in Australia.

HOSPITAL ACCREDITATION

Hospital Department Recognition

From the commencement of the 2004 hospital year, the recognition of individual training positions will cease and be replaced by recognition of hospital departments. While this may facilitate the introduction of the revised FANZCA Training Program, it is not the main reason for the change. The change to recognition of departments has become necessary in order to ensure that all ANZCA registered trainees have equal access to accredited training time. In the event that it is considered that adequate supervision is not available then restriction of the number of trainees in that Department will be appropriate.

INTERNAL AFFAIRS

Joint Consultative Committee in Anaesthesia – Paediatric Anaesthesia Policy

The JCCA which comprises members of the RACGP, ACRRM and ANZCA has requested ANZCA's endorsement of an amended policy on paediatric anaesthesia. Council endorsed the JCCA policy:

That endorsement for elective paediatric anaesthetics down to age 12 months may be granted on an individual practitioner basis after demonstration of the need for such endorsement and assessment/accreditation by regional representatives of the JCCA, such endorsement to be related to the Area of Need and dependent on the Maintenance of Professional Standards.

ANZCA Multicentre Trial Secretariat

Council has approved the formation of a Multicentre Trial Secretariat to form a core group of individuals with experience in the development of Multicentre Trials, to receive input from Fellows and provide assistance in the production of well constructed protocols suitable for funding submissions. In the future, guidance with Ethics Committees and formulation of proposals may also be provided by the core group. Council has agreed to fund the initial establishment of this Secretariat, anticipating that within twelve months this activity should become self-funding.

Physical Facilities – NSW Office

Council has approved the installation of videoconferencing facilities in the New South Wales Regional Committee Office. These facilities will be designed to enable presentations from the College Office or participation in activities being delivered from other areas. These facilities will also be available for use by interested parties and organisations.

International Scholarship

On the recommendation of the Asia Pacific Committee, Council will award an annual scholarship to an applicant from the Asia Pacific region. The objectives of the scholarship are to provide the recipient with the opportunity to improve knowledge, skills and attributes in the areas of medical expert in anaesthesia, communicator, collaborator, manager, health advocate, scholar/teacher and professional, in order to increase his/her capacity to develop anaesthesia in his/her own country for the benefit of the community. The scholarship will include return economy airfare between the home country and Australia or New Zealand and a living allowance and cost for attendance at approved educational activities. Assistance for family travel may be provided.

ANAESTHESIA SERVICES FOR AREAS OF NEED IN AUSTRALIA

Following a review of the process for assessment of anaesthesia services for Areas of Need in Australia, an updated document is published on the College website.

CONTINUING EDUCATION AND QUALITY ASSURANCE 2005 ASM

Following a recommendation from the Australian Department of Foreign Affairs and Trade, Council has agreed to defer the Combined Scientific Meeting which was to have been held in Kuala Lumpur in 2005 to a more suitable time. The 2005 ASM will now be held in Auckland, New Zealand. Associate Professor Kate Leslie, the 2003 Australasian Visitor, will visit New Zealand during the ensuing year.

2003 New Fellows Conference – Port Arthur, Tasmania

The following nominees were accepted by Council:

New Zealand	Dr Alexander Khrapov/ Dr Karen Pedersen
Queensland	Dr Peter Harms/Dr Mark Lai
South Australia/	
Northern Territory	Dr Peter Doran/Dr Philip Blum
Tasmania	Dr Simon Morphet

PROFESSIONAL DOCUMENTS

The following Professional Documents were updated / promulgated and are published in this Bulletin:

- PS3 *"Guidelines for the Management of Major Regional Analgesia"*
- PS39 *"Minimum Standards for Intrahospital Transport of Critically Ill Patients"*
- PS48 *"Statement on Clinical Principles for Procedural Sedation"*
- IC10 *"Minimum Standards for Transport of Critically Ill Patients"*



General Practitioner Anaesthetists (GPAs) and the Joint Consultative Committee on Anaesthesia (JCCA)

There are many rural and remote communities in Australia which cannot support the services of a specialist anaesthetist working full time.

In these areas the expertise and skills of the GPA are essential to the safe provision of anaesthesia and critical care services to the population living in these centres.

The Australian and New Zealand College of Anaesthetists (ANZCA) has long recognised the following needs for the GPAs:

1. Appropriate training
2. Ongoing professional development & maintenance of standards.

The JCCA was formed in 1994 to oversee these two processes. This Committee represents a collaboration between ANZCA, the Royal Australian College of General Practitioners (RACGP), and more recently the Australian College of Rural and Remote Medicine (ACRRM). RACGP provides the secretariat for the Committee.

TRAINING

Since 1992 this has comprised a year of training in JCCA-accredited Advanced Rural Skills Posts (ARSP) in anaesthesia, a standard examination, and the issue of a completion letter.

Since 1994, 119 GPAs have completed the ARSP course and the examination; a further 18 GPAs completed a similar period of training before 1994: 137 GPAs in total.

MAINTENANCE OF PROFESSIONAL STANDARDS (MOPS)

The JCCA oversees the enrolment, participation and completion of a tri-ennial MOPS program for GPAs. The requirements for this program have changed a few times over the last few years.

Currently, participation by a GPA in any one of the ANZCA, RACGP or the ACRRM MOPS programs is recognised for ongoing credentialling and continuing professional development.

EQUIVALENCE

In 2002 the JCCA decided that it would be advisable to assess the training and experience of those GPAs who

1. Were in practice before the ARSP training was introduced,
2. Had not had the opportunity to take part in the program, or

May have done other anaesthesia training (e.g. overseas) and to look at their "equivalence" in terms of training and ongoing experience.

This decision was effectively introducing a "grandfathering" process, with the intention of using the uniform standard set by the ARSP training as a standard of anaesthesia training for all GPAs.

A subcommittee of the JCCA was set up to assess applicants, consisting of Dr David Merefield (RACGP), Dr Di Khursandi (ANZCA) and Dr John Quayle (ACRRM), with advice from the previous ANZCA assessor, Professor John Gibbs. The brief of the subcommittee was to be as inclusive as possible.

Applicants were asked to submit a CV, including postgraduate anaesthesia training and qualifications, as well as their ongoing experience in anaesthesia.

ASSESSMENT

Those who had completed the ARSP, or those whose training and experience were considered equivalent to ARSP GPAs, would be assigned to the category "JCCA Accredited"; those who were not deemed equivalent would be "JCCA Enrolled". A process giving GPAs the opportunity to upgrade to the Accredited category is being developed.

At three subcommittee meetings in 2002/2003 the training and experience of the 113 GPAs who have so far applied were assessed.

RESULTS

110 (97%) applicants were assessed as equivalent.

The other three applicants, who were assessed as "JCCA Enrolled", were relatively recent graduates, had had little or no postgraduate anaesthesia training, and were not involved in the ongoing provision of a range of anaesthesia services.

13 (11.5%) of the applicants were in full time anaesthesia practice

30 (26.5%) had obtained the United Kingdom or South African Diploma of Anaesthesia

6 (5%) had completed the ARSP.

CLINICAL ATTACHMENTS

ANZCA Fellows in rural centres may be asked to provide supervision for a local GPA for a period of clinical attachment to the anaesthetic department.

It is to be hoped that any Fellow who is asked to do this will feel able to cooperate, as the clinical attachment is a very important aspect of ongoing professional development and maintenance of standards for GPAs.

Dr Diana Khursandi
20 Feb 2003

Papua New Guinea Anaesthesia, Intensive Care and Pain Medicine – a new era begins.



At the end of 2002, the Medical Officer, Nursing and Allied Health Project (MONAHP), the vehicle by which AusAID funded a broad range of health education activities to PNG came to an end after 7 years of support. This project funded 35 educational visits by anaesthetists, intensivists and pain medicine specialists to Port Moresby, Mt Hagen, Goroka, Madang, Lae, Rabaul and Alotau. It also funded training visits by anaesthetic Registrars from PNG to a number of Australian hospitals from 6-12 months.

Fortunately a new contract has been negotiated between AusAID and the PNG Government, with reduced funding, for the next 3 years, to continue these activities. From the point of view of anaesthesia, intensive care and pain medicine, the last 7 years has seen:

- Graduation of 10 anaesthetists from the 4-year Master of Medicine (Anaesthesia) program.
- Entry of 10 Registrars into training, with 3 due to graduate this year, and 3 in 2004.
- Appointment of Dr Harry Aigeeleng to the newly created Lecturer position in Anaesthesia in the School of Medicine, UPNG.
- Replacement of the old Anaesthetic Technical Officer (ATO) one-year apprenticeship through the Department of Health with a one-year Diploma in Anaesthetic Science course through the UPNG. Graduates will be Anaesthetic Scientific Officers (ASO's), working under direct or indirect supervision of Specialist Anaesthetists. Entrants are either Nurses or holders of the existing ATO certificate, the latter doing a conversion course.
- Appointment of Mr Marx Yabri (previously the senior ATO in Madang), to the newly created Coordinator position in Anaesthesia for the Diploma course.

The academic year at UPNG began with a media conference to launch the new Diploma program, and the following information was published in The National on February 3rd, 2003.

"A new chapter has been made in the history of the country's clinical and health services with the launching of the new program in anaesthesia at the University of Papua New Guinea.

UPNG Vice Chancellor Professor Lance Eastcott launched the Diploma in Anaesthetic Science (DAS) program at the

School of Medicine and Health Sciences boardroom on Friday.

After three years of planning, the first intake of students in the Diploma in Anaesthetic Science started their study last week in the School.

The DAS course proposal was accepted by the UPNG Council last year following consideration of a submission supported by a course committee formed at the request of the PNG Society of Anaesthetists.

The UPNG course will replace the training program for anaesthetic technical officers (ATO) established 30 years ago when nursing and health extension officers were given an apprenticeship-type training by expatriate anaesthetists.

While the skill and dedication of a generation of ATOs have served PNG well in a practical way, the Health Department and the UPNG agreed that a new program was necessary to meet the requirements of the National Health Plan and the scientific advances in anaesthesia and surgery.

The new course, which currently enrolled nine students, has already attracted high quality applicants from PNG and the Pacific Islands. It has a national curriculum and assessment process which allowing the students to remain in hospitals in rural areas for their practical experience after a study block in Port Moresby."

During the last few years, ANZCA has instituted a prize for the best candidate in the MMed examination, a prize for the best undergraduate performance in the anaesthesia term of final year Medicine, and offered MOPS participation to the two most senior anaesthetists in PNG.

In 2002, Dr Aigeeleng attended the ASM in Brisbane, and the New Fellows' Conference.

Anaesthesia, Intensive Care and Pain Medicine in PNG are striving for self-sufficiency, but have a way to go. As education visits decrease, it will be even more important for anaesthetists visiting with surgical teams, either via the RACS Tertiary Health Services Program, or via other agencies, to assist in any way possible with teaching of all types for both Specialists, Registrars and Scientific Officers.

Papua New Guinea



Specialist Anaesthetists, Registrars, Anaesthetic Technical Officers, Anaesthetic Scientific Officer Trainees, Resident Medical Officers, Medical Students, Anaesthetic Technicians. CLINICAL SCIENCES BUILDING SCHOOL OF MEDICINE UPNG PORT MORESBY, February 2003

2003 New Fellows' Conference

The 2003 New Fellows Conference will be held at the Fox and Hounds Motor Lodge, Port Arthur, Tasmania from Wednesday evening, 30 April to Friday, 2 May 2003.

To date the following nominees will represent the various Regions:

New South Wales	Dr Anne Jaumees and Dr Brendan Orr
Queensland	Dr Peter Harms and Dr Mark Lai
South Australia/Northern Territory	Dr Peter Doran and Dr Philip Blum
Tasmania	Dr Simon Morphet
Victoria	Dr Sesto Cairo and Dr Adam Tucker
New Zealand	Dr Alexander Khrapov and Dr Karen Pederson

JOINT FACULTY OF INTENSIVE CARE MEDICINE

Queensland	Dr Peter Garrett
Victoria	Dr Julian Hunt-Smith
New South Wales	Dr John Lambert
South Australia	Dr Gerry O'Callaghan
New Zealand	Dr Andrew McKee
Board Member	Dr John Myburgh

FACULTY OF PAIN MEDICINE	Dr Jennifer Morgan
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Dr Melanie Olsen

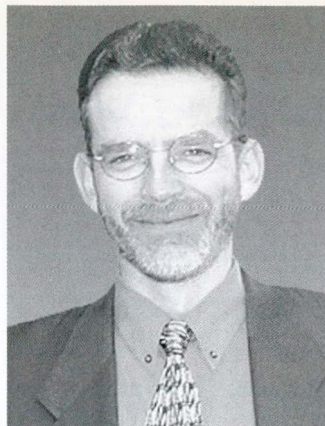
Undergraduate Prizes in Anaesthesia

The recipient of the 2002 ANZCA Prize for The Flinders University of South Australia was Dr Melanie Olsen. Dr Olsen was presented with her Prize at the University's Graduation Ceremony held in December 2002.



Mr Roger Flesker

The recipients of the 2002 ANZCA Prize for the University of Tasmania were Dr Michael Lees (Year 6) and Mr Roger Flesker (Year 5), who were presented with their Prizes at the University's Awards Ceremony held in December 2002.



Education Report

RUSSELL W. JONES, Director of Education, ANZCA

The oral or viva-voce examination is one of several traditional methods of assessment commonly used in medical examinations¹. Its popularity is such that some form of oral examination is used in the speciality of Anaesthesia throughout the English speaking world². The power of the viva as an assessment tool arises from its ability to assess a great deal of anaesthesia, intensive care and pain medicine related knowledge, skill and attitude. This includes an evaluation of a Candidate's ability to:³

- Problem solve
- Communicate
- Display knowledge
- Clinically reason
- Employ clinical judgement
- Evaluate clinical situations
- Choose treatments and justify choices
- Deal with changing situations
- Make decisions

In addition, the viva offers the Examiner enormous flexibility and undeniable face validity.

Eagle and his colleagues (see footnote 3) describe several types of questions particularly useful for vivas conducted by our College and Faculties. Each viva session can commence with a relatively non-stressful **introductory question** designed to put the Candidate at ease. Although this question provides information and serves a useful purpose it is generally not used to make critical decisions about performance on the examination. Examples include:

What are the ANZCA Guidelines for intra-op monitoring?

What are the contra-indications to thiopentone?

Consultant type questions are moderately paced questions with a clinical scenario and ample room for discussion (the discussion may be truncated at the discretion of the Examiner). For example:

A patient with a history of severe asthma presents for elective cholecystectomy. How would you assess and manage this patient?

These situations can be easily adapted to acute medical problems:

Intraoperatively, this patient has now developed increased inspiratory pressures and unilateral air entry. The O₂ saturation is 89%. What would you do?

Action type questions require a Candidate to make a series of decisions and describe actions with little discussion. The emphasis is on the candidate working quickly through a clinical scenario. For example:

You are called urgently to the labour ward to manage a hypotensive parturient with a major antepartum haemorrhage, with a foetal heart tracing that shows bradycardia.

You are called to provide a cardioversion in CCU for a man who had a myocardial infarction two days ago, and now has developed ventricular tachycardia one hour after lunch.

A series of brief action questions (sometimes referred to as **snapper questions**) can be useful to assess the Candidate who is having difficulty making clinical decisions or taking action. These questions tend to be informative for Examiners though intense and tiring for Candidates. For example,

Shortly after you give penicillin to your patient the mean arterial blood pressure is 50 mmHg. What do you do?

You are called to the Recovery Room to see a patient who has just had a radical neck dissection and who is now cyanosed.

What...?

Process control questions are intended to address problems related to the process of the clinical examination rather than specific content issues. Potentially useful examples include:

What are your specific concerns as you approach this patient? to pin down a Candidate who is rambling.

The patient with the chronic subdural whom you have been assessing suddenly loses consciousness and dilates a pupil ... to change the time scale for a Candidate who is making overly theoretical responses.



A workshop on vivas was held for Primary Examiners at ANZCA House on 15-16th February 2003. Interest in this topic and the success of the workshop is indicated by the participation of 27 of the 33 Primary Examiners. The accompanying photographs were taken during the workshop showing participants hard at work. Thanks to all participants and College staff who gave up their weekend to pursue this important topic.



- 1 Thomas CS, Mellsop G, Callender J, Crawshaw PM, Ellis A, Hall J, MacDonald P, Silferskiold P, Romans-Clarkson S. The oral examination: a study of academic and non-academic factors. *Med Educ* 1992; 27: 433-439.
- 2 Pope WDP. Anaesthesia oral examination. *Can J Anaesth* 1993; 40(10): 907-10.
- 3 From:
Eagle CJ, Martineau R, Hamilton K. The oral examination in anaesthetic resident evaluation. *Can J Anaesth* 1993; 40(10): 947-53.
Kearney RA, Puchalski SA, Yang YHY, Shakun EN. The inter-rater and intra-rater reliability of a new Canadian oral examination format in anesthesia is fair to good. *Can J Anaesth* 2002; 49(3): 232-36.
Schubert A, Tetzlaff JE, Tan M, Ryckman JV, Mascha E. Consistency, inter-rater reliability, and validity of 441 consecutive mock oral examinations in anesthesiology: Implications for use as a tool for assessment of residents. *Anesthesiology* 1999; 91(1): 288-98.

Overseas Trained Specialists Performance Assessment

The following candidates have completed the requirements of the Overseas Trained Specialists assessment process and been admitted to Fellowship.

Cormac John Michael FAHY
Bernd FROESSLER
Brian Francis McAWANEY

SA
SA
NSW

Mohan Gopal NERLEKAR
Robert Daren RIX
Daniel ROUX

VIC
NSW
South Africa

Special Interest Group Cardiothoracic, Vascular and Perfusion Annual Report – 2002

Introduction

The role of the Cardiothoracic, Vascular And Perfusion Special Interest Group (CVP SIG) continues to evolve and represents a broad based forum for those with specific interests within our specialty. Apart from contributing to the major national continuing education meetings and conducting a biennial meeting, the CVP SIG provides a forum for the exchange of ideas to ultimately improve the management of the patients under our care. This includes patients undergoing cardiac, thoracic and vascular procedures, and patients with significant cardio-respiratory disease undergoing other procedures. We now have 503 members.

The CVP SIG Website (<http://www.anzca.edu.au/sigroups/cvp/index.htm>) is located under the CE&QA section of the College Website (www.anzca.edu.au).

CVP SIG Executive

I would like to thank the retiring members of the SIG Executive (Dr Malcolm Anderson and A/Profs Paul Myles and Peter Klineberg) for their valuable contributions and welcome the three new members (Drs Brad Fawkes, Mario Kalpokas and Roman Kluger). I would particularly like to acknowledge the major contribution to all aspects of the work of the CVP SIG of Professor Peter Klineberg. Peter was a foundation member of the Executive and its Chairman for the last two and a half years.

The current membership of the CVP SIG Executive (ratified at the CVP SIG Annual General Meeting, held in May 2002 in association with the Brisbane ANZCA ASM) comprises:-

- Dr Chris Cokis, Western Australia
- Dr Brad Fawkes, New South Wales
- Dr Mario Kalpokas, Victoria
- Dr Roman Kluger, Victoria (Chairman)
- Dr Lisa McEwin, South Australia
- Dr Andrew McKee, New Zealand
- Dr John Murray, Queensland
- Dr David Whish, Queensland

It is important that state members of the Special Interest Group use their Executive representatives as spokespersons. The Executive conducts teleconferences throughout the year to plan continuing education activities, discuss issues pertaining to cardiovascular and vascular anaesthesia and perfusion, and to discuss future initiatives of the CVP SIG.

Continuing Education Meetings During 2002-3

May 2002 – ANZCA ASM

The CVP SIG contributed a session entitled "Rethinking Cardiovascular Monitoring For Major Surgery" and a number of basic and advanced TOE workshops to the Brisbane ANZCA ASM in May 2002.

October 2002 – ASA 61st National Scientific Congress in Adelaide

The CVP SIG contributed a session on "Chest Emergencies" with three speakers. Professor Peter Slinger (Invited International Speaker) discussed "Airway Management for Emergency Thoracotomy", Professor Alan Merry (Invited Australasian Visitor) gave a presentation on "Anaesthesia for a Ruptured Thoracic Aorta", and Mr Craig Jurisevic discussed "Acute Thoracic Trauma".

The CVP SIG will have significant input into two major meetings in 2003 –

1. May 2003 – ANZCA Annual Scientific Meeting in Hobart

The CVP SIG will contribute a session, which will focus on some aspects of cardiac medicine including implications of interventional cardiology, techniques for improving ventricular function and new developments in cognitive function following cardiac surgery. We will also be involved in a number of TOE workshops at this meeting.

2. 7th Biennial Continuing Education Meeting CVP-SIG

This meeting will be held at the Millennium Hotel in Queenstown, New Zealand on 22-24 August 2003. In addition to the three, half-day sessions of academic program, this location will offer many activities in a very picturesque setting.

Transoesophageal Echocardiography (TOE)

A version of the proposed College Professional Document regarding TOE has been available via the CVP SIG website for some time now. This document (with some final modifications by members of the CVP SIG) was considered at the October ANZCA Council Meeting, where it was approved. It was formally added to the list of ANZCA Professional Documents – "PS 46 – *Recommendations for Training and Practice of Diagnostic Perioperative Transoesophageal Echocardiography in Adults*".

I would like to thank the many members of the CVP SIG who supported and contributed to the preparation of this document, through its long gestational period. Like all Professional Documents, it will require revisions in the

future (based on feedback from members and new developments) to ensure that it continues to foster the most appropriate use of this technology for the benefit of our patients.

In July 2002 the Medical Services Advisory Committee (MSAC) recommended to the Health Insurance Commission that intraoperative TOE be limited to valvular procedures only. Strong representation by the College, ASA and Australasian Society of Cardiac and Thoracic Surgeons, emphasising the lack of evidence for such decision, resulted in MSAC reconsidering and rescinding this recommendation. It was emphasised that such a limitation on the use of intraoperative TOE would probably have an adverse affect on the management and outcomes of patients undergoing other forms of cardiac surgery.

It is important that we foster research into the impact of new technologies on patient outcomes, as evidence of improved patient outcomes and cost-effectiveness will be required to maintain government support of new technologies.

Medical Perfusion

Work continues on revision to Professional Document P27 – *Standards of Practice for Major Extracorporeal Perfusion*. This is a complex area where there is a large variation in practice across Australia and New Zealand. New developments such as Off-pump Cardiac Surgery (OPCAB) requiring “perfusion stand-by” also need to be addressed.

The management of total body perfusion continues to be an area of major medical management during cardiac surgery, and we shall continue to emphasize this area in our educational activities.

Future initiatives

These will include –

1. Provision of infra-structure (with the assistance of the College Information Technology Committee), such as email lists or bulletin boards, to facilitate the exchange of ideas, questions, clinical pearls etc. amongst the members of the SIG on-line.
2. Development of an on-line (virtual) journal club utilizing the College website and library facilities (especially the increasing number of full-text journals which are becoming available as the College subscribes to more journals electronically).
3. Fostering research activities in areas of interest to the CVP SIG.

Last, but definitely not least, I wish to thank Helen Morris for her vital contribution to this Special Interest Group. Her expertise, efficiency and enthusiasm are pivotal in all of our organization and communications.

Roman Kluger
Chairman

Letter to the Editor

Dear Mrs Sheales

The following letter is submitted for publication in the Bulletin. I would be grateful for your advice as to whether it is suitable for that journal, as I note there have not been many letters published in the Bulletin recently. Please let me know if you feel it is better suited for Anaesthesia and Intensive Care, or the ASA Newsletter. My reason for submitting it to the Bulletin is that its content may be seen as addressing one aspect of standards of care.

Quandaries in the Recovery Room

I write to express a point of view on one aspect of recovery room care. Simply expressed, I take the view that upon completion of surgery, there is no essential need for a patient to occupy theatre space. The one and only criterion for suitability for transfer of a patient to the recovery room should be that the patient is in a stable state and likely to remain so during the short trip to the recovery room.

Whether or not the patient is breathing spontaneously is not an issue.

I take the trouble to express this point of view because it is one that meets with certain criticism, indeed antagonism on the part of some, but by no means all of my nursing colleagues.

Of course, in many cases, the patient will be breathing spontaneously before leaving theatre. However, in those who are not I can see no merit in holding up theatre turnaround time by obsessively waiting for a first breath.

Two recent additions of anaesthetic equipment have facilitated the transfer and recovery room care of an apnoeic patient. One is the laryngeal mask airway, which is usually well tolerated and usually guarantees an unobstructed airway. The other is the 300 ml plastic T bag, which is light, simple in design, portable and flexible in that it allows the application of positive pressure breathing and the application of manual CPAP, which in some cases improves oxygenation.

It goes without saying that the anaesthetist must be in attendance or immediately accessible to a patient who is apnoeic.

Why then the mistrust and opposition? Perhaps it is an educational matter? The idea of a patient being apnoeic seems to summon up an excessive and disproportionate concern in some. When recorded on an observation chart, it can trigger the automatic submission of an incident report and that does nothing for harmonious relationships. Furthermore, the concept of passive oxygenation by mass movement of oxygen, well known to anaesthetists, is not necessarily well understood by our nursing colleagues.

I pose this question: is a recovery room a place where patients may recover from anaesthesia (including the recovery of spontaneous breathing) or is it, as some would seem to believe, merely a holding facility for fully recovered patients awaiting transfer to the general ward?

I would welcome feedback on my comments via my email address supplied.

Peter G Beahan
Email: beahan@bigpond.net.au

"A DIFFERENT VIEW"

Essentially, Dr Beahan is suggesting that it is safe and appropriate to move a ventilated apnoeic patient from the operating theatre to the recovery room, presumably as a matter of routine.

Transfer of ventilated patients occurs every day in a busy hospital for many reasons, often to or from intensive care units and occasionally with good reason from the operating theatre to the recovery room, but it is accepted that such transfers are not without risk. Guidelines for intra-hospital transport are to be found in Professional Document PS 39. Among the recommendations, it is stated: "...transport itself must be justified...benefits must outweigh the risks of moving the critically ill patient..." While it may be argued that these postoperative patients are not usually critically ill, they are nevertheless unlikely to be 'stable' as they are in the process of waking and may suddenly reject whatever artificial airway they have in situ. The place to manage this important part of the anaesthetic is in a controlled environment, not a hospital corridor. What are the benefits of Dr Beahan's suggestion? It may give the nurses more time to clean up and prepare for the next patient, and it may possibly decrease the theatre turnover time, but with careful controlled anaesthesia, any gain is likely to be small.

Anaesthesia in Australia and New Zealand is safer or as safe as anywhere in the world. Why compromise safety for so little benefit?

Richard Willis
President ANZCA



Dean's Message

Neil Matthews

As I mentioned in the last Dean's Message, there are some extremely important issues for the Joint Faculty to resolve. There is no doubt that we have a higher profile as a body and are becoming more cohesive as a group. We have important and valued relationships with our parent bodies, RACP and ANZCA, and with ANZICS. But there is a pressing need to develop a statement on who we are and where we are going, a topic I presented at the recent Annual Meeting of the NSW Region.

Strategic Analysis and Future Directions

This year the Board of the Joint Faculty will need to lead and develop a strategic approach on the way forward for discussion by the Fellowship. This discussion will be against a background of the valued relationships we have established, the need for safeguarding and improving our achievements to date, ensuring financial responsibility and having links and resources to enable effective responses to issues and demands, such as the recent AMC accreditation process.

Introduction of the New Training Program

Elsewhere in this Bulletin is an article on the new Training Program. It is the product of long term consideration by the Board and its Regional/National Committees. The Program meets our requirements of ensuring production of well trained Intensive Care Specialists, and has the advantage of allowing flexibility and coordination with other programs. The new Program will commence for new Trainees from the start of the 2004 Hospital Year, but the training requirements of current Trainees will remain unchanged whilst melding into the new structure of basic and advanced training. No Trainee will be disadvantaged by a change in process.

It is important to promulgate the Program widely and I encourage Supervisors and Trainees to acquaint themselves with the principles and seek any advice promptly. A forum open to all Fellows and Trainees will be held at the ASM in May to present the program and answer questions.

Of particular note:

- Core Intensive Care Training undertaken overseas will be permitted but subject to a detailed process of prospective assessment.
- The medical component of training will be extended from six to twelve months.
- Success at an acceptable Primary will be a 'gate' to advanced training.
- Intensive care training undertaken in basic training will be approved but trainees must undertake two years of core training in intensive care as an advanced trainee.

Annual Scientific Meetings, Hobart, May

In May, the Joint Faculty is involved in the Intensive Care components of the ANZCA and RACP Annual Scientific Meetings, both in Hobart. Further details are provided by our ASM Officer, Dr John Myburgh elsewhere in this section of the Bulletin. I look forward to seeing you there.

Neil Matthews

Items of Interest

FROM THE FEBRUARY BOARD MEETING

EDUCATION AND TRAINING

Review of the JFICM Program

The principles of the new training program in Intensive Care were approved by the Board and it was agreed that the program will apply to all new trainees registering for Intensive Care training from the 2004 Hospital Year. An article outlining the program is printed elsewhere in the Bulletin.

Role of Regional Education Officers

The Board resolved that Policy Document IC-5 "The Duties of Regional Education Officers in Intensive Care" be withdrawn and the Regulations amended to remove this position from the Faculty's educational infrastructure. Regional Committees may still choose to appoint a person if required, however it will not be mandated.

Prospective approval of core training

The Administrative Instructions have been amended to reflect that all trainees, including ANZCA Provisional Fellows undertaking Intensive Care training, will be required to register before three months of core Intensive Care training have been completed.

The deadline for applications for approval of all core training will be within three months of commencing training.

Proposed accreditation of overseas units for training

The new training program will have provision for prospective accreditation of overseas units for the purpose of a limited period of core training.

Eligibility to sit the Fellowship Examination/Primary Examination

The Regulations pertaining to the Primary Examination requirement have been amended to allow trainees who have successfully completed the ACEM Primary Examination and the RACS Primary Examination to be exempt from the requirement to sit the ANZCA Primary examination. This applies only to trainees in relation to the Intensive Care training program. The revised Regulation is printed elsewhere in the Bulletin.

As part of the new training program, the Board has resolved that eligibility for advanced training and presentation for the Fellowship Examination will be dependent upon fulfilment of one of the following:

- Success at the ANZCA Primary Examination. Exemptions from the ANZCA Primary Examination may be granted for the purposes of Intensive Care training only as stated above, or

- Completion of basic physician training and success at the Written and Clinical FRACP (adult or paediatric) examinations, or
- Successful completion of basic training which is accepted by the Board as having a curriculum and assessment process which ensures that the trainee has knowledge and skills similar to that of a successful candidate of ANZCA or RACP basic training and examination.

The Role of the Senior Registrar

The Board noted the results of a survey on the prevalence of the Senior Registrar role. These are currently being analysed by the Training Committee.

Trainee representation

The Board agreed to consider ways in which trainees may provide input and feedback into the educational process. The terms of reference of the Training Committee will be expanded to address broader educational objectives and this may be an appropriate forum for trainees to be involved.

EXAMINATIONS

A Dedicated Intensive Care Primary Examination

A sub-committee has been established to consider this issue. Types of assessment and the implications of a separate Primary Exam will be considered along with its place in the new training program and the overall direction of the Joint Faculty.

PROFESSIONAL AFFAIRS

AMC Accreditation

The Board reviewed the final report of the accreditation of the Joint Faculty in 2002, noting accreditation has been granted for six years, with specific recommendations as follows:

- The establishment of an Education and Training Committee
- Further development of the Joint Faculty as an entity
- Development of Rural training options
- The validity of rigorous Fellowship Examinations
- Increased flexibility for assessment of overseas trained specialists
- Improved recruitment to Intensive Care as a specialty

The Board is considering ways of implementing the recommendations. Continued accreditation is dependent upon an annual report on progress.

Policy Documents

The Board revised the following documents with input from Regional Committees and they will be promulgated and circulated shortly:

IC-1 "Minimum Standards for Intensive Care Units"

IC-3 "Guidelines for Intensive Care Units seeking Accreditation for Training in Intensive Care Medicine"

The following documents were approved as joint documents:

IC-10 "Minimum Standards for Interhospital Transport of Critically Ill Patients"

PS 39 "Minimum Standards for Intrahospital Transport of Critically Ill Patients"

PS 48 "Clinical Principles for Procedural Sedation"

These documents are printed elsewhere in the Bulletin.

Support Scheme for Rural Specialists

The Joint Faculty is involved in an initiative of the Commonwealth and the Committee of Presidents of Medical Colleges to form a support scheme for rural specialists. Its aim is for the Specialist Colleges to develop and deliver a structured, continuous professional development program which meets the needs of rural specialists. It is envisaged these programs would be delivered via conferencing technologies eg video telephone or internet links.

CONTINUING MEDICAL EDUCATION

Annual Scientific Meetings

The Board resolved to maintain involvement in the ANZCA and the RACP Annual Meetings in the short term, but has not excluded the possibility of a stand-alone JFICM ASM.

Professor Ian Roberts was appointed as the JFICM Foundation Visitor for 2004, to be held in Perth. The 2005 ASM is scheduled to be held in Auckland.

New Fellows Conference, Hobart May 2003

The following representatives will attend the New Fellows Conference held in association with the ASM in Hobart in May.

Dr Peter Garrett, Qld

Dr Andrew McKee, NZ

Dr Gerry O'Callaghan, SA

Dr John Lambert, NSW

Dr Julian Hunt-Smith, Vic

INTERNAL AFFAIRS

Representation of Tasmania

The Board welcomed A/Professor A.J. Bell to the Board as the co-opted representative for Tasmania. Formal establishment of a Regional Committee in Tasmania will now take place.

The issue of regional representation in the ACT will be explored.

Communication

The Joint Faculty website is now live and includes new 'members' and 'publications' sections and an improved navigational facility. Electronic mailing lists for Trainees and for Fellows are now also being utilised.

A Review of the Intensive Care Training Program

INTRODUCTION

Following a period of extensive review, the Joint Faculty will introduce a revised training program for trainees registering with the JFICM from the 2004 Hospital Year.

The establishment of the Joint Faculty to form a single intensive care training program has provided the opportunity to improve the program and allowed changes to reflect the variety of doctors choosing intensive care as a career and to ensure the needs of the workforce are met.

The main considerations in this process have been to ensure:

- a program which will result in a well trained ICM specialist
- flexibility of training programs
- avoidance of major prolongation of the training program
- coordination with elements of other programs

At the February meeting of the Board, a number of principles were approved.

PRINCIPLES

1. The program will be divided into 3 Basic Training Years (BTYs) and 3 Advanced Training Years (ATYs).

This is consistent with other College programs including the Royal Australasian College of Physicians (RACP) and the Royal Australasian College of Surgeons (RACS), and more recently, ANZCA.

2. The BTY1 may be the same as Postgraduate Year (PGY) 2

The first PGY follows Medical Council requirements. The second postgraduate year (PGY2) may contain elements that are appropriate for the beginning of the 3 BTYs.

3. The prescribed program for the BTYs of the Australian and New Zealand College of Anaesthetists (ANZCA), Royal Australasian College of Physicians (RACP), Australasian College for Emergency Medicine (ACEM) and Royal Australasian College of Surgeons (RACS) will be accepted by the JFICM for its trainees. Registration with the JFICM or the above bodies must occur within 3 months of the start of BTY2. Retrospective recognition may be allowed for BTY1.

Training will commence within one of the above programs.

4. The prescribed supervision for the above programs will be accepted by the Joint Faculty for its trainees.

For example, if a trainee is registered for the ACEM program, the reports from the relevant Supervisors of

Training in the discipline will be accepted for accreditation of basic training for Joint Faculty trainees.

5. It is proposed that minimum elements of the total program would be:

- 24 months of core intensive care medicine training as an advanced trainee.
- 12 months clinical anaesthesia in either BTYs or the non-core (elective) ATY year, at least 6 months of which must have been undertaken in a registrar position. (This is a position where significantly more responsibility is taken for patients than as a "junior resident / house surgeon / house physician". It may involve supervision of others and should also contain periods where anaesthesia is administered without the immediate presence of a more senior practitioner).
- 12 months clinical internal medicine in either BTYs or the non-core (elective) ATY year, at least 6 months of which must have been undertaken in a registrar position. (This is a position which is or could be accredited by the RACP for advanced training and which involves supervision of junior medical officers and supervision by registered specialist physicians).
- For the Paediatric endorsement, training must include at least 18 months of the ATYs in a paediatric intensive care unit approved for core training. 12 months must be undertaken in a C24 paediatric intensive care unit.

The length of time to be spent in both anaesthesia and medicine was the subject of much debate. It was eventually considered that if these periods were distributed appropriately between the BTYs and the elective (non-core) ATY, that no prolongation of the training program would necessarily occur.

6. The ANZCA Primary, FRACP Written/Clinical, FACEM Primary or the FRACS Primary Examinations are accepted as appropriate prerequisites for entry into the ATYs of the JFICM program. The Examination must be passed during the BTYs or ATY1 before training progression (if the examination is attempted during ATY1, accreditation for ATY1 is not guaranteed and can only be considered after conditional, prospective approval by the Censor, and successful candidacy of the Examination). If such an approved year of core training is accredited, the second year of core training must be a continuous year in a C24 accredited unit and the JFICM examination may not be attempted during the second core year.

It was considered that even though the various examinations are not the same, that any trainee who had passed the relevant examination (and done the BTYs), was suitable to proceed to the ATYs. It is undesirable to sit the examination in ATY1, but this is allowed in the interests of flexibility and avoidance of holding back training. A committee is being established to consider the viability of a dedicated JFICM Primary examination for those who in the future would wish to follow a purely intensive care training route. Meanwhile, one of the above 4 examinations would be a prerequisite for entry to the ATYs. The acceptance of these four different examinations allows a major increase in flexibility and will also facilitate dual certification.

7. At the discretion of the Censor and the Training Committee, trainees who have undertaken Specialist training overseas may be exempted from some or all of the elements of basic training. Exemption will depend on an assessment of equivalence of training and / or examination.

This will vary in each case, and will be decided by the Censor and Training Committee. The aim is to introduce flexibility and fairness, especially where trainees have done their early training overseas and may even have a full overseas specialist qualification.

8. All trainees must spend at least 2 years of the total training program (including BTYs and ATYs) in Australia, New Zealand or Hong Kong.

9. The following will not be included at this stage:

- mandatory course modules
- structured curriculum modules
- mandatory previous intensive care experience before entering the ATYs.

The Board agreed that although some courses are highly recommended, it is inappropriate to make them compulsory if they are not administered by the Joint Faculty. Availability of places was a further issue. It would of course, be sensible for a trainee to do some ICM within the BTYs, but this is not compulsory in the interests of flexibility.

10. ATY requirements:

- Trainees must be registered with the JFICM before three months of advanced training have been completed
- All ATYs will be prospectively approved
- At least one of the ATYs must be spent as a continuous core year
- At least 12 months of the two core years must be undertaken in an intensive care unit in Australia, New Zealand or Hong Kong accredited as C24
- The non-core ATY is considered an elective year and may sometimes be needed to complete the minimum requirements. This year may be spent in

any combination of:

Intensive Care Medicine
Clinical anaesthesia
Pain medicine
General medicine
Specialist medicine
Emergency medicine
Surgery
Research
Other disciplines related to intensive care medicine

This is similar to the present requirements.

11. As at present, trainees will be required to complete 12 months of core intensive care training prior to presentation for the Fellowship Examination.
12. Basic Training requirements for a dedicated Intensive Care Training Program

While the BTYs of ANZCA, RACS, RACP and ACEM programs are acceptable, there will be a group of trainees who are not registered for any other training program other than the JFICM program. These trainees will need a structure for the BTYs and also a way of obtaining supervision:

Structure:

- a) 2 of the 3 years in any combination of:
- Intensive care medicine
 - Anaesthesia
 - Internal medicine (general or specialties)
 - Emergency medicine
 - Surgery

These years may give the trainee a chance to fulfil the minimum requirements in anaesthesia / medicine before reaching the ATYs. The flexibility will also allow trainees to change to the JFICM program midstream e.g. in the middle of their BTYs from another discipline, without compromising or unduly extending their training.

- b) basic training must be undertaken in hospitals with accreditation by relevant training Colleges
- c) the Supervisor of Training in ICM in the hospital where the trainee works, will be responsible for the overall supervision of the trainee as soon as they register with the JFICM, but may ask for assessments from the SOTs in the particular discipline where the training is taking place
- d) the Primary or FRACP Written/Clinical Examination should be undertaken during BTYs.

Although one of these examinations may be attempted during the first ATY, this is strongly discouraged, as the trainee should be concentrating on developing other aspects of ICM at this stage.

CHANGES FROM CURRENT POLICY

In practice the major changes that would be effected by the introduction of the new program will be:

1. Success at the ANZCA Primary, the FRACP Written/Clinical Examinations or an acceptable Primary Examination in a relevant discipline will be a 'gate' to entering Advanced Training. Trainees will not be able to complete any advanced (that is, core intensive care) training except conditionally following prospective approval by the Censor.
2. No intensive care training undertaken in the first three years of training will be accredited as core (advanced) training.
3. The medical component of training will be increased from six months to one year.
4. Trainees will be able to complete up to two years overseas each in basic and advanced training. Advanced Training undertaken overseas will require prospective approval of the Censor and be required to meet set criteria.
5. All advanced training will be prospectively approved by submission of an application detailing the specific year, better identifying intensive care trainees for improved supervision and training.

Appointment of Supervisors of Training in Intensive Care

The following appointments have been ratified by the Board of Faculty:

Dr Anne Leditschke	The Canberra Hospital
Dr Michael O'Leary	The St George Hospital
Dr Philip Sargent	Mater Misericordiae Children's Hospital
Dr Peter Scott	Mater Misericordiae Adult Hospital
Dr Ian Seppelt	Nepean Hospital
Dr David Williams	St Vincent's Hospital, Vic

Joint Faculty of Intensive Care Medicine

POLICY DOCUMENTS

IC-1	(1997)	Minimum Standards for Intensive Care Units <i>Bulletin August 1994, pg 44</i>
IC-2	(2000)	The Duties of an Intensive Care Specialist in Hospitals with Approved Training Posts <i>Bulletin November 2000, pg 53</i>
IC-3	(2002)	Guidelines for Intensive Care Units seeking Accreditation for Training in Intensive Care Medicine <i>Bulletin June 2002, pg 63</i>
IC-4	(2000)	The Supervision of Vocational Trainees in Intensive Care <i>Bulletin March 2000, pg 57</i>
IC-6	(2002)	The Role of Supervisors of Training in Intensive Care Medicine <i>Bulletin September 2002, pg 36</i>
IC-7	(2000)	Secretarial Services to Intensive Care Units <i>Bulletin March 2000, pg 58</i>
IC-8	(2000)	Quality Assurance <i>Bulletin November 2000, pg 55</i>
IC-9	(1997)	Statement on Ethics and Patients' Rights and Responsibilities <i>Bulletin November 1997, pg 68</i>
IC-10	(2003)	Minimum Standards for Transport of Critically Ill Patients <i>Bulletin March 2003, pg 29</i>
IC-11	(2002)	Guidelines for the In-Training Assessment of Trainees in Intensive Care Medicine <i>Bulletin June 2002, pg 66</i>
IC-12	(2001)	Examination Candidates Suffering from Illness, Accident or Disability <i>Bulletin November 2001, pg 63</i>
IC-13	(2002)	Recommendation on Standards for High Dependency Units Seeking Accreditation for Training in Intensive Care Medicine <i>Bulletin June 2002, pg 68</i>
PS38	(1999)	Statement Relating to the Relief of Pain and Suffering and End of Life Decisions <i>Bulletin June 1999, pg 93</i>
PS39	(2000)	Intrahospital Transport of Critically Ill Patients <i>Bulletin July 2000, pg 84</i>
PS40	(2000)	Guidelines for the Relationship Between Fellows and the Healthcare Industry <i>Bulletin March 2000, pg 55</i>

Joint Faculty of Intensive Care Medicine

AUSTRALIAN AND NEW ZEALAND COLLEGE OF ANAESTHETISTS
ROYAL AUSTRALASIAN COLLEGE OF PHYSICIANS

ABN 82 055 042 852

AUSTRALASIAN COLLEGE FOR EMERGENCY MEDICINE

ABN 76 009 090 715

Review IC10 (2003)

MINIMUM STANDARDS FOR TRANSPORT OF CRITICALLY ILL PATIENTS

Safe transport of the critically ill patient requires accurate assessment and stabilisation of the patient before transport. There should be appropriate planning of transport and optimum utilisation of communications. Safe transport requires the deployment of appropriately trained staff with essential equipment, and effective liaison between referring, transporting and receiving staff at a senior level.

Clinical management during transport must aim to at least equal management at the point of referral and must prepare the patient for admission to the receiving service.

1. Administrative Guidelines

Administrative guidelines held by each establishment engaging in patient transport should cover all aspects of transport of the critically ill. These may include guidelines for such matters as insurance, budgeting and personnel. Staff safety and protection are the responsibility of the employing authority, who should carry appropriate insurance for all contingencies related to patient transport activities and should also provide personnel with personal protective equipment and instruction.

1.1 Initiation and Response

Medical transport services using road ambulance, fixed and rotary wing aircraft must be coordinated for prompt, rapid, efficient and safe transport of critically ill patients on a 24 hour basis.

Initiation of patient transport should be simple, with clear guidelines and communication channels. Ideally, the referring doctor should have to make only one telephone call to initiate retrieval or patient transfer.

In all situations requiring transport of the critically ill, rapid response of the transport system and minimal delays are paramount. In emergency interhospital transports, dispatch of the medical transport team to the referring hospital should not

be delayed pending the identification of a receiving hospital.

1.2 Coordination and Communication

Coordination of transport services for the critically ill should be centralised to ensure optimum utilisation of resources. Designated individuals need to be available immediately for consultation and planning.

Reliable communication must be available at all times between the transport team and the referring and receiving hospitals and ambulance services. At the time of first contact, clinical advice can be provided to referral staff and sought from senior specialty receiving staff as well as allow for appropriate planning, advice and preparation by the retrieval team.

1.3 Responsibility

The chain of responsibility must be clear throughout the transfer. Responsibility for patient care during transport must be vested in an appropriately qualified medical practitioner. Formal handover from referring doctor to retrieval doctor and from the latter to the receiving hospital doctor is essential.

1.4 Documentation

The clinical record should document the patient's clinical status before, during and after transport, relevant medical conditions, environmental factors and therapy given.

1.5 Audit, Quality Improvement and Teaching.

Organisations involved in medical transport should have an effective quality management system which can monitor and audit performance and make recommendations for appropriate improvements.

There should be a system for regular review of cases to assess the level of care provided, transport processes and logistics.

A means of patient follow-up after transport should be available as feedback to the clinical staff involved and to assist in evaluating the performance of the organisation and system overall. There should be opportunities for peer review within the organisation. Such audit activities should involve all members of the retrieval team (medical and non-medical), as well as administrators. (General principles of Quality activities are outlined in the Joint Faculty Policy Document IC-8 "Quality Assurance").

Provision should be made for feedback to the referring centre. The system should also provide an educational function for all components for the transport service.

2. Categories of Transport

Transport of critically ill patients is necessary in two sets of circumstances, namely, prehospital transport and interhospital transport.

Intrahospital transport is the subject of the Colleges and Joint Faculty Policy Document PS39 "Minimum Standards for Intrahospital Transport of Critically Ill Patients".

2.1 Prehospital Transport refers to:

Transport of a critically ill patient from an accident or illness location to hospital. Standards for non-medical prehospital transport are determined by ambulance and emergency services and are not covered by this policy document. Where prehospital transport is carried out by medical personnel, the same standards apply as for interhospital transport.

2.2 Interhospital Transport may be:

2.2.1 *Emergency Interhospital Transport:*

For acute life-threatening illnesses emergency interhospital transport may be needed due to either lack of diagnostic facilities, lack of staff and/or facilities for safe and effective therapy in the referring hospital.

2.2.2 *Semi-urgent Interhospital Transport:*

For transport of the critically ill patient, either to a higher level of care or for a specialty service.

3. Staffing

Personnel engaging in transport of critically ill patients should be selected for the transport role, be trained in the various aspects of patient transport that they would be expected to be involved with and participate in the organisational quality activities (1.5 above). Senior staff must also be regularly involved in these activities and be available for instruction and supervision of junior

staff. Ability to communicate effectively, and to function as part of a team is essential.

Staff must be briefed on emergency procedures such as vehicle evacuation by the authority operating the vehicle. Staff undertaking patient transport must be aware of the limitations of available equipment and capabilities, the working transport environment and at the referral site prior to dispatch.

3.1 Prehospital Transport

Medical officers and/or nurses who are deployed to provide prehospital treatment and transport must have received training that is in keeping with their expected pre-hospital role (eg. scene organisation and safety, patient assessment, treatment and extrication, mass casualty and chemical, biological and radiological incidents etc.). They should be familiar with local pre-hospital ambulance and emergency service protocols, roles responsibilities and equipment. EMST training for medical personnel undertaking this role would be ideal.

Medical staff should also be familiar with the range of communication devices used.

3.2 Interhospital Transport

Interhospital transport of critically ill patients must be performed by an appropriately qualified retrieval team including an experienced medical practitioner. On extended journeys, sufficient staff should be carried to allow maintenance of high standards of patient care, and to allow for staff rest periods.

Where it would be immediately lifesaving, the transport of expert medical assistance e.g. a neurosurgeon, to the referring hospital should be considered.

Specifically trained personnel are required for the transport of neonates, infants and young children.

Special considerations are also required for long haul/international patient retrievals – not detailed in this document.

4. Transport

Mode of transport used will depend partly on clinical requirements, on vehicle availability and on conditions at the referring and receiving sites.

4.1 Choice of transport vehicle will be influenced by:

- nature of illness
- possible clinical impact of the transport environment
- urgency of intervention
- location of patient
- distances involved

- number of retrieval personnel and volume of accompanying equipment
- road transport times and road conditions
- weather conditions and aviation restrictions for airborne transport
- aircraft landing facilities
- range and speed of vehicle

4.2 Transport Vehicle Requirements

Vehicles should be appropriate to the task in terms of design (including cabin environment) and equipment. Regular inspection and servicing of vehicles and on-board equipment is required. Particular requirements relate to:

- safety of both patient and staff
- adequate space for patient access and to perform acute medical interventions
- adequate power and gases for life support systems
- adequate suction
- easy access for safe embarkation and disembarkation
- adequate lighting and internal climate control
- restraints for stretcher, equipment and passengers
- acceptable noise and vibration levels and noise protection for passengers
- adequate speed and response times
- good communication systems, both internal and external
- auditory patient monitoring alarms routed through attendants' headsets where noise is unavoidable, in addition to usual visual alarms
- impaired gravity drip of fluids

In general, medical fittings to aircraft, and bulky items carried need to have approval of the aviation authorities.

4.3 Air transport exposes patients and crew to particular risks including:

- reduced oxygen partial pressure
- the need for pressurisation to sea level when clinically indicated
- risk of rapid depressurisation
- expansion of air filled cavities, such as endotracheal tube cuff, middle ear, air filled spaces under airtight dressings etc.
- limb swelling beneath plaster casts

- worsening of air embolism or decompression sickness
- danger from agitated patients
- limited space, lighting and facilities for interventions
- noise
- extremes of temperature
- extremes of humidity
- acceleration, deceleration and turbulence
- vibration
- electromagnetic interference between avionics and monitoring devices
- danger from loose, mobile equipment.

4.4 With all modes of transport, stabilisation of vital signs, provision of a secure airway and IV access, securing of all catheters and provision of appropriate monitoring before departure is fundamental to safe transport.

5. Equipment

Equipment carried should be appropriate for each transport. The duration of transport, the patient's diagnosis and severity of illness and the level of therapeutic intervention required should be taken into account. In choosing equipment, attention must be given to size, weight, volume, battery life, oxygen consumption and durability, as well as to suitability for operation under conditions of transport.

Equipment should be adequately restrained, and continuously available to the operator. Patient stretchers should be capable of being adequately secured within the transport vehicle. Electrical and gas supply fittings of all equipment must be compatible with those of the transport vehicle. All equipment to be used in aircraft must be assessed for compliance with regulatory requirements.

Specialised equipment is required for neonatal and paediatric transport.

Equipment that should be considered includes:

5.1 Respiratory Support Equipment

- Airways (range of oral and nasopharyngeal airways and a range of laryngeal mask airways)
- Oxygen, masks, nebuliser
- Self-inflating hand-ventilating assembly, with PEEP valve available
- Suction equipment of appropriate standard
- Portable ventilator with disconnect and high pressure alarms

- Intubation set (including a range of laryngoscope blades and endotracheal tubes)
- Emergency surgical airway set
- Pleural drainage equipment
- Oxygen supply in excess of that estimated for the maximum transport time.

5.2 Circulatory Support Equipment

- Monitor/defibrillator/external pacer combined unit
- Pulse oximeter
- Aneroid sphygmomanometer (not mercury containing) with a range of cuff sizes
- Vascular cannulae, peripheral and central
- IV fluids and pressure infusion set
- Infusion pumps
- Arterial cannulae
- Arterial monitoring device (pressure transducer)
- Syringes and needles (a needleless system would be ideal)
- Pericardiocentesis equipment
- A sharps disposal container and a bag for biological refuse

5.3 Other Equipment

- Nasogastric tube and bag
- Urinary catheter and bag
- Nasal decongestant spray
- Instruments, sutures, dressing, antiseptic lotions, gloves
- Thermal insulation and temperature monitor
- Splints and equipment for spinal and limb immobilisation
- Neonatal/paediatric/obstetric transport equipment when applicable
- Dressings, bandages, slings, splints and tape
- Cutting shears and portable torch
- Gloves and glasses for staff protection

5.4 Pharmacological Agents

All drugs should be checked and clearly labelled prior to administration. The range of drugs available should include all drugs necessary to manage acute life-threatening medical emergencies and those specific to the patient's clinical condition.

6. Monitoring

Monitoring of certain physiological variables should be carried out during transport. Some or all of these basic recommendations will need to be exceeded routinely depending on the physical status of the patient.

Clearly any monitoring method may fail to detect unfavourable clinical developments and monitoring does not guarantee any specific patient outcome.

6.1 Clinical Patient Monitoring

6.1.1 Circulation

The circulation must be monitored and recorded at frequent and clinically appropriate intervals by detection of the arterial pulse, measurement of the arterial blood pressure and assessment of peripheral perfusion.

6.1.2 Respiration

Respiratory rate should be assessed and recorded at frequent and clinically appropriate intervals.

6.1.3 Oxygenation

The patient's oxygenation should be assessed at frequent and clinically appropriate intervals by observation.

6.1.4 Level of consciousness by G.C.S

6.1.5 Pain score

6.1.6 *Patient comfort* – even deeply-sedated patients should be provided with appropriate noise, eye and environmental protection.

6.2 Equipment Monitoring

6.2.1 Pulse Oximeter and capnometer

A pulse oximeter must be used for every critically ill patient during transport. A capnometer (preferably with a waveform display) must be used to monitor all patients receiving mechanical ventilation.

6.2.2 Alarms for Breathing System Disconnection or High Pressure and Ventilator Failure

When an automatic ventilator is in use, a device capable of warning promptly of low and high pressure in the breathing system should be in continuous operation.

6.2.3 Electrocardiograph

Equipment to monitor and continually display the electrocardiograph must be used for every critically ill patient during transport.

6.2.4 Physiological pressures

Equipment for the invasive or non-invasive recording of blood pressure, and where clinically indicated, other physiological pressures should be available for all critically ill transported patients.

6.2.5 Other Equipment

When clinically indicated, equipment to measure other physiological variables, such as temperature and point of care blood analysis should be available.

6.2.6 Equipment Alarms

Equipment should incorporate audible and visual alarms.

7. Training

All new staff involved in patient transport should undergo appropriate training in all aspects of patient transport outlined in this document and undertake supervised patient transports prior to independent transport duties. In particular, training should include instruction in local retrieval systems, organisational and transport vehicle related matters and the defined team role and functions of both medical and non-medical retrieval team personnel.

Training for safety and other operational issues should occur on a regular and recurrent basis, with due consideration for occupational health and safety and infection control issues.

These guidelines should be interpreted in conjunction with the following Colleges/Joint Faculty Policy Document:

PS39 "Minimum Standards for Intrahospital Transport of Critically Ill Patients"

This document has been prepared having regard to general circumstances, and it is the responsibility of the practitioner to have express regard to the particular circumstances of each case, and the application of this document in each case.

Professional documents are reviewed from time to time, and it is the responsibility of the practitioner to ensure that the practitioner has obtained the current version. Professional documents have been prepared having regard to the information available at the time of their preparation, and the practitioner should therefore have regard to any information, research or material which may have been published or become available subsequently.

Whilst the Colleges and Joint Faculty endeavour to ensure that professional documents are as current as possible at the time of their preparation, they take no responsibility for matters arising from changed circumstances or information or material which may have become available subsequently.

Promulgated: February 1992

Reviewed: February 1996

Date of current document: February 2003

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JFICM Website: <http://www.jficm.anzca.edu.au>

ANZCA Website: <http://www.anzca.edu.au>

ACEM Website: <http://www.acem.org.au>



Participants at 21st Anniversary Lunch Faculty of Anaesthetists / RACS GSM, Christchurch, 1973.



Retiring Councillor Professor John Gibbs presented the President with a tray which he crafted depicting the College Coat of Arms, Australia and New Zealand.

ANZCA Council 2002

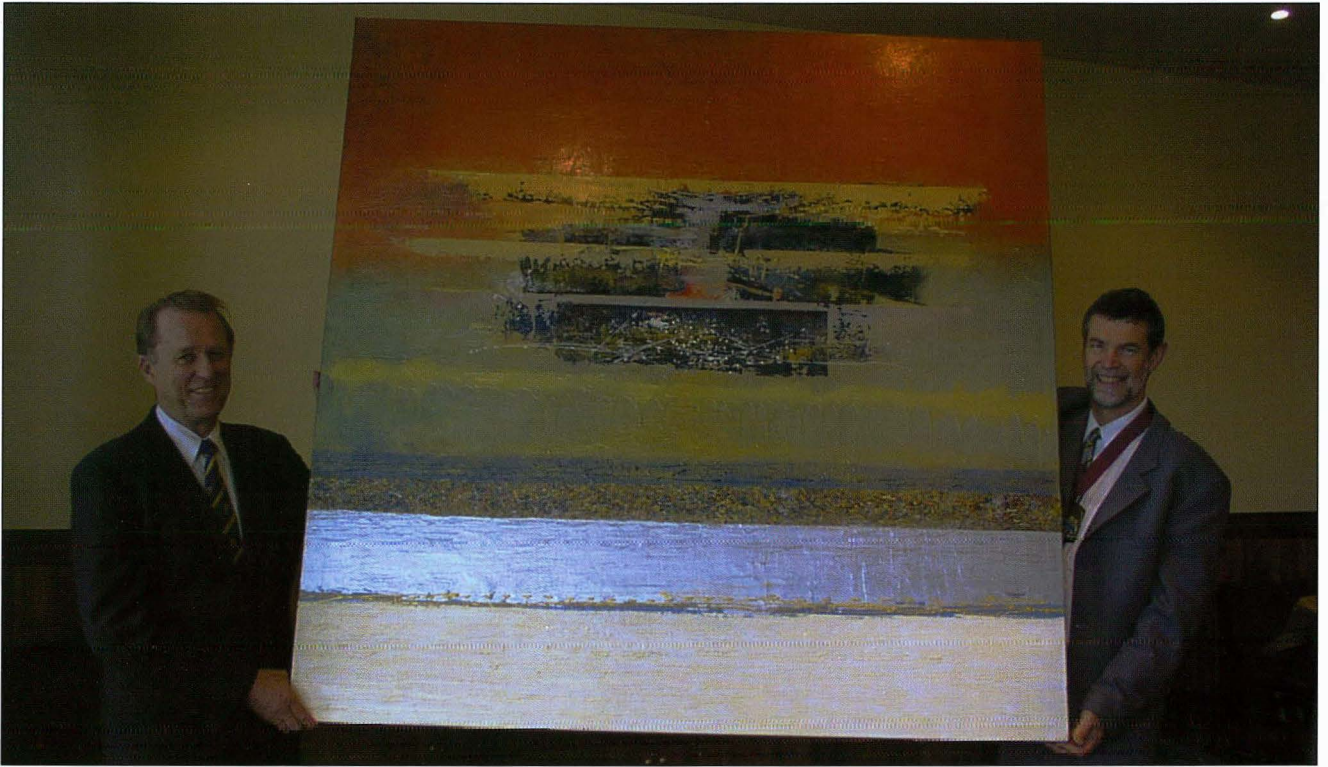


Back Row: Dr Di Khursandi, Professor Teik Oh, A/Professor Kate Leslie, A/Professor Tony Weeks, Dr Leona Wilson, A/Professor Bruce Waxman (RACS), Dr Kerry Brandis, Mrs Joan Sheales (CEO)

Front Row: Dr Wally Thompson, Dr Mike Martyn, Dr Neil Matthews (Dean, JFICM), Dr Richard Willis (President), Professor Michael Cousins (Vice President), A/Professor Leigh Atkinson (Dean, FPM), Dr Stuart Henderson

Absent: Dr Rod Westhorpe

Gift to the College



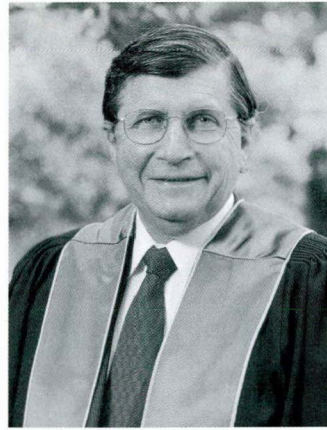
Professor Kingsley Faulkner (President, Royal Australasian College of Surgeons) presenting Dr Richard Willis with a gift to the College, a painting entitled "Return to Forever", by artist Trevor McNamara commemorating the opening of ANZCA House.

Board – Faculty of Pain Medicine – 2002



Back: Drs J A Fleming, G I Rice, R S Henderson, B M Kinloch, Professor M J Cousins AM, Dr P E Macintyre.

Front: Ms M A Benjamin (Executive Officer), Dr D Jones, A/Professor M L Cohen (Vice-Dean), A/Professor R L Atkinson (Dean), Drs P A Briscoe, C R Goucke.



Dean's Message

Leigh Atkinson

Where Are We Going?

It is only four years since the Faculty of Pain Medicine was formed with the generous support of the Australian and New Zealand College of Anesthetists. This was an innovative move, bringing together in one clinical mould, medical practitioners with a special focus on pain medicine. It included Fellows from anaesthetics, psychiatry, medicine, surgery and rehabilitation medicine. The earlier development of the International Association for the Study of Pain and the Australian Pain Society had heralded the need for conditions in Australia and New Zealand to take this initiative. Since the days of Patrick Wall and John Bonica doctors had recognised the increasing need to become forceful advocates for patients suffering acute chronic and cancer pain. Before the 1980s pain medicine had been a neglected aspect of undergraduate teaching.

The effective leadership of your Inaugural Board and the generous harmony of the members from our sister Colleges resulted in the rapid development of documented professional standards. These laid down the requirements for training units, trainee selection the educational curriculum, hospital accreditation of training programs and MOPS requirements for our Fellows. The foundation of a new specialty was created and this drew international attention. In addition 10% of the annual subscription has been set aside for research activities.

In the past decade the need for this special clinical focus has become more important as our populations live longer and insist on a higher quality of life. In our media there is a growing call for governments to expand the health budget and health services. In 1988 an NHMRC report identified that chronic pain cost \$10 million a year in Australia. The former Minister of Health, Dr Michael

Wooldridge, noted that it was the most costly condition for the Australian health service. Blyth identified one in five citizens in New South Wales suffered from chronic pain. The long waiting lists for pain patients at our public hospital pain clinics further support the observation of unmet needs in this area.

Today we are a Faculty of 161 Fellows with 41 graduates by examination. Our trainee program has been accredited by the Australian Medical Council. It is now time to review our progress and ask, "where are we going?".

Firstly, the Faculty seeks specialty recognition and a preliminary submission will be forwarded to the Australian Medical Council in February. Whilst our workforce is overtaxed with patient needs we lack the numbers to service these demands. We need Federal and State Health Department support to expand the funded training and service positions in our public hospital pain clinics. In some states waiting lists are taking on heroic proportions.

Fellows of the Faculty need to advance the message of Pain Medicine to our health administration colleagues and to our colleagues in the other medical disciplines. We plan to raise our profile in the annual scientific meetings of these Colleges by presenting conjoint pain programs and by developing pain modules that might be included in the advanced trainee programs.

In these times of rapid medical advances we need to facilitate the flow of information to Fellows and patients through our website. The Faculty is continuously working to build this web site and establishing better links with our international colleagues in Pain Medicine. In addition our Fellows need to chart the progress of the Australian medical experience in pain medicine by reporting clinical outcomes and research activities at our national and international meetings. To assist this further we are setting

aside funds annually for research activities which need to be recognised at a National Health and Research Medical Council level.

Whilst we have grown as a Faculty we face the competing priorities of other medical disciplines.

Over the next few years we will need all the support of our Fellows to support the growing needs of Pain Medicine requirements for chronic, acute and cancer patients.



Leigh Atkinson
Dean

Admission to Fellowship

The following have completed all training and examination requirements for admission to Fellowship of the Faculty of Pain Medicine

Sarah Margaret Lindsay	QLD
Ivan Llewellyn Marples	SA
Nicholas Patrick Plunkett	NZ

Highlights from the Board Meeting

HELD ON NOVEMBER 21, 2002

Education

MOPS

All Fellows are to be encouraged to use the College MOPS Program which is very flexible and designed to assist Fellows record their CME, teaching, training and research, and quality assurance activities, in order that they can demonstrate that they are maintaining their professional standards.

It was noted that the participating Colleges, in principle, support the Faculty running its own MOPS Program.

"Pain Medicine" Journal

Fellows will be contacted by email with a request to respond if they wish to receive the Pain Medicine Journal on-line for a six months trial period. A survey form will also be forwarded to Fellows who accept this trial subscription so that an evaluation of the Journal can be undertaken.

NHMRC Acute Pain Management: Scientific Evidence Guidelines

P Macintyre who is chairing the working group undertaking the revision of these Guidelines, advised that the working group will be meeting at the College in February to discuss the work plan and other relevant issues.

Examination

P Briscoe reported that eleven of the thirteen candidates who presented for the 2002 examination were successful.

The Board thanked P Briscoe and L Roberts for their work in organising this examination.

The 2002 Barbara Walker Prize for Excellence in Pain Management has been awarded to Jennifer Morgan FANZCA, WA

Merit Awards have been awarded to David Holthouse RACS neurosurgical trainee, WA and Stephanie Keel FANZCA, WA

To assist trainees in their preparation for examination, it was agreed that the following additions be included in the Training Manual:

In the Supervisor of Training Quarterly Reports, the Supervisor is to ensure that the trainee:

1. Performs a sufficient number of supervised long cases under Faculty examination conditions.
2. Attends a number of tutorials each quarter.
3. Attends a number of multidisciplinary meetings each quarter.

Case Reports:

1. Supervisors of Training are to sign-off that they have read their trainee's case report prior to submission to the Faculty.
2. Case Reports can be submitted by email. Anonymity of the author is to be maintained.
3. The Case Report will gain automatic acceptance if it has been published in a refereed journal in recent years of training and provided it encompasses the multidimensional aspects of pain medicine.
4. A cover sheet is to be submitted with the Case Report:
 - Signed by the SoT and the trainee indicating that the SoT has read the Case Report.
 - The SoT is to indicate the methodology used by the trainee for sourcing references.
 - Include a word count.

Hospital Accreditation

Pain Units in the following hospitals have been approved for training:

Nepean Hospital, NSW

Prince of Wales/Sydney Children's Hospitals, NSW

Royal Adelaide Hospital, SA

Royal Perth Hospital, WA

Royal Hobart Hospital, Tas

Professional Documents

The following Professional Document was approved as a joint College and Faculty document and is published elsewhere in this Bulletin.

PS3 Guidelines for the Management of Major Regional Analgesia

Palliative Medicine

M Cousins tabled his report on a meeting of the Australasian Chapter of Palliative Medicine on November 18. He commented that the main aims of the meeting were:

1. To provide an update on the development on the Chapter of Palliative Medicine.
2. To discuss the Chapter's plans for AMC speciality recognition.
3. To discuss the current training program and the possibilities for conjoint training.
4. To discuss the possible development of a Diploma in Palliative Medicine.

Recognition of Pain Medicine as a Specialty

It was agreed that the Faculty apply for specialty recognition through the AMC and the working party comprise L Atkinson, M Cousins and R Goucke with assistance from G Phillips.

White Papers

It was noted that due to the other Faculty activities being undertaken by Board Members, the working parties are having difficulty in progressing the development of these white papers. It is hoped that Fellows would be able to assist with progressing their development.

Annual Scientific Meetings

Hobart 2003

Letters of invitation have been forwarded to speakers. All other arrangements are progressing well.

The Acute Pain SIG has requested Professor Kehlet to speak at their session. This was accepted.

Refresher Course Day

The program and speakers have been finalised and the registration brochure will be prepared over the next few months.

Perth 2004

Stephan Schug has accepted the position of Scientific Convenor for this meeting.

Refresher Course Day

It was agreed to approach the RACP with a view to linking the Refresher Course Day with its ASM in Canberra.

2005

It was noted that Council will be reviewing the venue to conduct this meeting.

Refresher Course Day

It was agreed to approach the RANZCP with a view to linking the Refresher Course Day with its ASM in Sydney.

Named Lecture at ASMs

In recognition of his enormous contribution to Pain Medicine and also his initiative in establishing the Faculty, it was unanimously agreed that the Plenary Session at the Annual Scientific Meetings be named the Michael J Cousins Foundation Lecture.

Combined Faculty/Acute Pain SIG Meeting

The Board supported the concept of a joint meeting to be held immediately prior to the 2003 ASA Meeting.

Web Page

It was agreed that as a service, the Faculty could advertise vacancies in Pain Management Centres on its web page.

Highlights from the Board Meeting Teleconference

HELD ON DECEMBER 16, 2002

Hospital Accreditation

Pain Units in the following hospitals have been approved for training:

Auckland Hospital, NZ

Flinders Medical Centre, SA

Education

M Cohen reported that the Education Committee met by teleconference on December 9, 2002 and the following issues were resolved:

- The Objectives of Training is to be revised.
- The Psychosocial Assessment document produced by Frank New and Faiz Noore was adopted. Following a few further minor amendments, it was agreed this could be added to the Faculty's web page.
- The New FANZCA Training Program Module on Pain Management. It was agreed that in its present format it is not a useable document and that a better teaching module would be some case-based scenarios. It is hoped to have this document prepared by May.

Pain Management in a Difficult Case of Osteogenesis Imperfecta

DR GRAHAM HOCKING, FRCA

The following treatise by Dr Graham Hocking, was submitted for assessment as part of his training requirements towards Fellowship of the Faculty. Assessors are asked to assess a treatise as they would for a journal article, enumerate the specific changes required or fail with suggestions as to how the treatise may be improved. This treatise was assessed as a pass. The Assessors cannot be held responsible for errors or any consequences arising from the use of information contained in this treatise. The views and opinions expressed do not necessarily reflect those of the Assessors or the Faculty.

Title:

Pain management in a difficult case of Osteogenesis Imperfecta

Key Words: Osteogenesis Imperfecta, Pain, Ketamine, Psychological

Summary

We present a 21-year-old man weighing 37 kilograms admitted to hospital with an acute exacerbation of persistent low back pain. He had a past history of Osteogenesis Imperfecta Type IV and multiple previous fractures. No apparent cause was found for his acute escalation in pain, which was unresponsive to rapidly escalating doses of opioids. Possible causes for this included neuropathic or psychosocial contributors, which were assessed. A blinded i.v. lidocaine trial produced no benefit suggesting that a neuropathic component was unlikely to be causing the reported degree of pain. Numerous psychosocial problems were identified and individual sessions with a psychologist commenced to try to address some of the issues. A ketamine infusion was used to facilitate opioid reduction in this patient who was by now tolerant. He was eventually discharged home on his previously stable dose of oral opioid for persistent bone pain related to previous fractures. Osteogenesis Imperfecta and the psychosocial issues surrounding it are discussed.

Introduction

This patient presented a complicated management problem involving co-ordination of many specialties within the hospital. It also demonstrates a multimodal pharmacological approach to treatment ranging from "simple" analgesics through opioids to NMDA antagonists (ketamine) and systemic local anaesthetics (lidocaine). There are also numerous psychosocial issues that influenced the pain experience and these are discussed.

Case history

A 21-year-old man weighing 37 kilograms was admitted to hospital with an acute exacerbation of persistent low back pain. He had a past history of Osteogenesis Imperfecta Type IV and multiple previous fractures.

Pain description

Onset: The pain came on suddenly two days previously after he 'went over a bump' in his wheelchair. Since there had been multiple painful exacerbations in the past he had tried to allow time for his pain to settle spontaneously, but without effect. The pain had increased over the last two days and was no longer controlled on his regular opioid dose.

Primary site and radiation: The pain was diffusely located in the lower lumbar area and right hip with no radiation into the leg.

Character: Pain descriptors were sharp, aching and throbbing. There were no burning, shooting or lancinating qualities to his pain.

Intensity (VAS): At rest he described his pain as 5/10. This increased to 7/10 on movement. Prior to his recent exacerbation it had been averaging 2/10 (on opioid medication).

Factors altering his pain: Pain was increased by movement and relieved by resting, lying down and keeping still.

Associated features: There were no autonomic or neurological features associated with this exacerbation and no nausea or vomiting. He admitted to recurrent constipation, although he had never experienced back pain with this in the past. He last opened his bowels two weeks previously.

Temporal features: On presentation, his pain was present all the time but fluctuated in intensity according to his position and movement. Prior to the exacerbation leading to this admission the pain had been stable as a continuous dull aching pain in the low lumbar region.

Effect of pain on activities: Prior to admission he had been able to continue studying for a science degree at the local university with the ultimate aim of pursuing a degree in Law. He had been able to mobilise in an electric wheelchair and care for himself at home in the University campus. Since the pain had increased, he had been unable to attend University and had been confined to his room due to incident pain. He denied significant sleep disturbance once he had settled and adopted a comfortable position.

Medications used for pain: Prior to admission he was taking MS Contin 30mg BD for persistent low back pain following recurrent vertebral fractures. This was usually effective at controlling his pain.

Past medical history: The patient reported multiple previous fractures (over 90) including vertebral involvement.

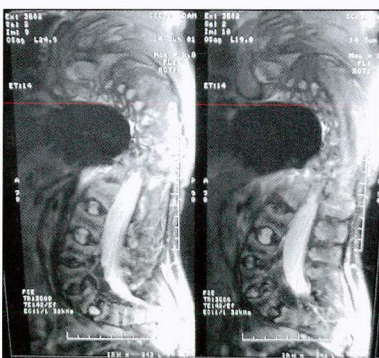
Patient's beliefs of the cause of the pain: He believed that he had developed another crush fracture of one of his vertebrae.

Expectations of outcome of pain treatment: Based on his previous experiences, he expected to spend a period of time in hospital requiring parenteral opioid medication during which time his "fracture" would heal. After that he would be able to wean the medication, return to his previously stable dose of MS Contin and return home to resume his "normal activities"

Knowledge, expectations and preferences for pain management: Having had frequent exacerbations of his pain in the past, the patient knew that an increasing dose of parenteral opioid would eventually control his pain. We discussed the options of opioids delivered as intermittent boluses either subcutaneously or intravenously, nurse controlled or patient controlled with the patients. It was agreed that the best initial option for acute pain management would be a patient controlled analgesia (PCA) device containing morphine sulphate.

Psychological aspects: These are covered in detail in the discussion.

Investigations:



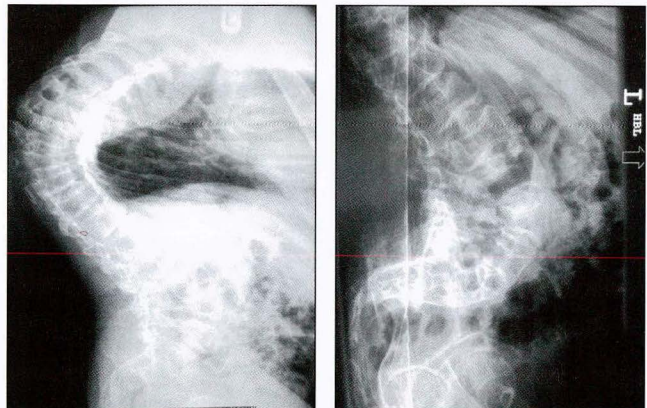
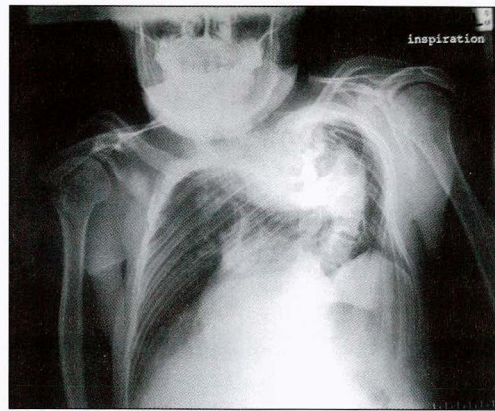
MRI Thoraco-lumbar spine showed most of the vertebral bodies had endplate fractures although there was no evidence for a single or small number of vertebral bodies with high signal; this would suggest that fractures are old but

an conclusions would be difficult given the degree of distortion of the anatomy. This sample image shows the degree of distortion of the anatomy. These factors may have easily made a small new injury difficult to identify.

Plain radiography of his chest, spine and pelvis (performed due to his history of a fall from his wheelchair) was unchanged from previous films although the problems in assessment need to be noted.

Any new injuries would have been difficult to distinguish from old findings, which included prominent kyphoscoliosis, multiple compression fractures of the spine and multiple healed rib fractures on the right.

Examination: General impression was of a young man, small for his age both in weight and height. He was lying



on his side in some distress, apparently from pain. Formal assessment of gait and standing was not possible. No new neurological findings were present in upper or lower limbs.

Progress: A morphine PCA (1mg bolus, 5minute lockout, no background infusion) was commenced, supplemented by regular oral paracetamol 1g QID and tramadol 100mg QID. This regime was chosen despite his previous opioid intake since it would provide a greater safety margin on a general ward. The PCA was initially not used to its optimal benefit due to persistent nausea. Following addition of tropisetron, his PCA usage improved with subsequent beneficial analgesic effect. The PCA was required for 5 days at which point his daily opioid requirement was converted to regular oxycontin 40mg BD with oxycodone or subcutaneous morphine provided for breakthrough pain. Amitriptyline 25mg nocte was commenced for sleep disturbance within hospital and as an analgesic adjunct

[McQuay 1996]. The dose of oxycontin escalated during the next four days without any apparent change in his pain intensity, which he persistently scored as 3/10 – 4/10.

After 4 days it was decided to change to a fentanyl PCA to assess opioid requirements with a view to converting to transdermal fentanyl. This was because of increasing concerns regarding constipation, which has been suggested is less of a problem with fentanyl compared to other opioids [Payne 1998]. Also, since there are no contraindications to non-steroidal anti-inflammatory drugs (NSAIDs) in OI, he was commenced on Ibuprofen 400mg TDS for its opioid sparing effect. Ibuprofen was chosen since it has good evidence for efficacy in acute pain (NNT 2.7) [Collins 1998]. However, these proved not helpful so he was converted back to oxycontin, the dose of which continued to escalate and reached a maximum of 300mg / day without significant side effects or indeed improvement of his pain scores. His constipation was controlled with regular doses of coloxyl with senna supplemented by a nurse administered “bowel milkshake” consisting of agarol, fibre and senna.

Faced with unrelieved pain, despite massive increases in opioid dose, we considered two possible reasons. Firstly, that psychosocial issues were contributing more to the pain experience than had been suspected. Indeed the possibility that he was prolonging the admission as a means of social contact was raised. Secondly, that there may have been an element of neuropathic pain which is well known to be only partially opioid responsive. The existing dose was maintained while reassessment of psychological issues and non-opioid approaches to pain management were explored; this aspect of the case is expanded in the discussion. He was seen by our Cognitive Behavioural Pain Management team and relevant strategies were discussed and taught. In order to assess if there was a significant neuropathic component to the pain he received a trial infusion of i.v. lidocaine [Kalso 1998]. This is believed to work by stabilising sodium channels and also by blocking glutamate evoked activity in the dorsal horn of the spinal cord [Biella 1993]. He obtained minimal benefit from a blinded infusion trial, describing similar pain scores during both lidocaine and placebo (saline). By this time he had become quite opioid tolerant, on high doses with minimal improvement in either pain intensity or function. It was decided to use a ketamine infusion to enable opioid reduction [Shimoyama 1996]. Ketamine was commenced at 5mg/hr and increased to a maximum of 10mg/hr. He remained on the ketamine infusion during which time his opioid dose was progressively weaned such that after 5 days he was back to his original pre-admission dose having suffered no ill effects or signs of withdrawal. Throughout all of this, his pain scores had been relatively constant, and there had been no improvement in function; he spent most of his time lying on his side in bed. He remained in some discomfort on discharge but described this as his “normal level”.

Discussion:

Osteogenesis imperfecta (OI) is an autosomal dominant disorder of the connective tissue, which is also known as “brittle-bone disease” because it renders those affected susceptible to fractures after minimal trauma. The currently accepted classification of the disease includes four types defined according to clinical and radiographic features [Sillence 1979], with some overlap among them.

Type I: Mildest type of OI. Frequency about 1 in 30,000

- Bones predisposed to fracture. Most fractures occur before puberty
- Normal or near normal stature, triangular shaped face
- Joint laxity and low muscle tone
- Blue/purple/grey sclera, brittle teeth, possible hearing loss often beginning in early 20's / 30's
- Scoliosis tendency
- Bone deformity absent or minimal

Type II: Most severe form. Reported incidence at birth around 1 in 60,000

- Frequently lethal at or shortly after birth, often due to respiratory problems. In recent years some people with Type II have lived into young adulthood.
- Ossification of bones is frequently incomplete.
- Numerous fractures and severe bone deformity
- Small stature with underdeveloped lungs

Type III: Intermediate severity

- Bones fracture easily. Fractures are often present at birth, and x-rays may reveal healed fractures that occurred before birth.
- Short stature, triangular face
- Blue/purple/grey sclera, brittle teeth, hearing loss
- Joint laxity and poor muscle development in arms and legs
- Scoliosis, barrel chest, respiratory compromise possible
- Bone deformity often severe

Type IV: Intermediate between Type I and Type III in severity

- Bones fracture easily, most before puberty
- Shorter than average stature, triangular face
- Normal sclera, brittle teeth, hearing loss
- Mild to moderate bone deformity
- Scoliosis, barrel chest

The total incidence of Types II, III and IV recognisable at birth may be as high as 1 in 20,000. Other features common in people with OI include excessive sweating due to a hypermetabolic state (occasionally display a non-MH hyperthermic response under general anaesthesia), easy bruising, a high-pitched voice and thin smooth skin.

Progressive neurological symptoms may result from basilar compression and communicating hydrocephalus.

All types of OI are caused by defects in Type I collagen, the major structural protein of the extracellular matrix of bone, skin, and tendons. Type I collagen is a long, helical molecule composed of two copies of the alpha1 chain and one copy of the alpha 2 chain. Each chain contains 338 uninterrupted repeats of the triplet GXY, where G is glycine, X is often proline, and Y is often hydroxyproline. The presence of glycine at every third residue is crucial to the formation and function of the helix, because its small side chain can be accommodated in the sterically hindered central region of the helix. [Prockop 1995].

The mutations of collagen that cause OI can be categorized into two groups. Most patients with Type I OI produce structurally normal collagen in reduced amounts because of a null alpha 1 (I) allele [Willing 1994]. Patients with types II, III, and IV OI have structural defects in one of the chains of collagen. The majority of the mutations (85%) result in the substitution of another amino acid for a glycine residue, and a smaller group (11%) is caused by single-exon splicing defects. The structural mutations affect connective tissue through a dominant negative mechanism, in which the presence of the mutant chain in the extracellular matrix directly disorganizes and weakens the matrix.

Although Type I collagen is abundant in the skin and vascular walls, OI is predominantly a bone disease. Several factors may be involved; for example, the mutant collagen may undergo less intracellular degradation and more secretion by osteoblasts than by fibroblasts, as well as more efficient incorporation into bone matrix [Sarafova 1998].

Patients with Types II, III and IV are often born with fractures or may show evidence of intra-uterine fractures that have healed. Indeed, the skilled ultrasonographer can detect changes in the bone structure in utero from the start of the second trimester. Chorionic villous sampling (CVS) can be analysed for abnormal collagen and cells obtained from amniocentesis can be analysed for genetic mutation at 8-12 weeks of pregnancy. Following birth, the diagnosis is usually made on the basis of clinical criteria. The presence of fractures together with blue sclera, dentinogenesis imperfecta or family history of the disease is usually sufficient to make the diagnosis. If necessary, this can be confirmed by assessing the quality or quantity of Type I collagen in a skin biopsy or by DNA mapping to locate the mutation.

Unfortunately, there is currently no cure or effective treatment available for these people and management is directed towards prevention of fractures whilst promoting as much mobility and independence as possible [Marini 1998]. Prolonged immobility can further weaken bones leading to muscle weakness and pain. Many patients with OI are confined to wheelchairs, as in this case, but still have recurrent fractures. For these patients, the combination of rehabilitation and selective orthopaedic procedures can improve their ability to care for themselves and increase their independence. Many fractures are

treated with short-term immobilisation in lightweight cases, splints, or braces to allow some movement as soon as possible after the fracture. The long-term goal is independence in all life functions (eg. self care, locomotion, recreation, social interaction and education), with adaptive devices as needed. Occupational therapy can help with fine motor skills and adaptive equipment for daily living. Continued physiotherapy improves independence and helps to reinforce the safe exercise needed to maintain bone and muscle mass. Swimming is particularly well suited to people with OI as it allows independent movement with little fracture risk. The placement of intramedullary rods in femurs or tibias ("rodding") may be indicated if the bowing deformity is greater than 40 degrees, to adjust alignment of the limbs and provide some internal support for weight bearing [Reing 1995]. The rods may be expandable or non-expandable depending upon the developmental age of the patient. However, even for patients who can walk, this approach does not decrease the rate of fracture or the scoliosis-related cardiopulmonary morbidity of OI. Progressive scoliosis leads to ventilatory problems. Bracing is generally avoided as it often deforms the ribs rather than straightening the spine. Spinal "rodding" may be appropriate in some if the vertebrae are still strong enough to support it. This had not been considered an option in our case.

Many therapeutic interventions, including fluoride and calcitonin, have been tried with little success. More recently the early use of bisphosphonates have shown some promise. These are synthetic analogues of pyrophosphate, a natural inhibitor of osteoclastic bone resorption. Bisphosphonates are effective in patients with osteoporosis, Paget's disease, and fibrous dysplasia, and they have few side effects [Lieberman 1995]. Previously, only a handful of patients with OI had been treated with one of these drugs, with reported benefit. Glorieux and colleagues performed an uncontrolled trial of the bisphosphonate, pamidronate, in children with OI Type III and IV [Glorieux 1998]. In their study 30 children, (age 3-16 years) were treated with intravenous pamidronate at four-to-six-month intervals. Their results show that chronic bone pain decreased, motor function improved, bone mineral density increased, and bone resorption decreased. There was a decrease in radiologically confirmed fractures of 1.7 fractures per year; the healing of fractures was not altered. The results provide some small degree of optimism for the future although further studies to determine the long-term effect of bisphosphonate therapy on the density, histologic features, and biomechanical properties of bone are required. It will be especially important to determine whether bisphosphonate-treated bone has improved functional properties despite the presence of mutant collagen in its matrix. Our patient had been receiving intermittent courses of i.v pamidronate according to a local protocol.

There are prospects for gene therapy in the treatment of OI [Marini 1997]. Two alternative approaches are being investigated. One is replacement of mutant cells with

normal cells through bone marrow transplantation. The principal challenge of this approach is how to target mesenchymal precursor cells to become osteoblasts that reside in the skeleton. The second approach, involving the suppression of mutant genes, aims to decrease the expression of the mutant allele by introducing ribozymes into the cells to cleave the mutant gene product while leaving the normal gene product intact [Grassi 1997]. If successful, this method should change a structural defect in collagen to a quantitative defect in normal collagen, with a correspondingly milder phenotype.

Clearly, patients with OI have multiple reasons to suffer acute, chronic and acute on chronic pain. This patient had suffered from repeated fractures and persistent generalised bone pain that had been palliated with opioids. It can be seen from the imaging there was gross distortion of normal anatomy leading to the potential for pain of nociceptive (bone, musculoskeletal), neuropathic or mixed aetiology depending upon the structures involved following fractures and the subsequent healing with remodelling. Notwithstanding the sensory input for pain in these patients, there is a major psychosocial component, which needs to be sought and addressed if any attempts at pain management are to be successful.

Each individual and family is affected in a unique way depending on the type of OI the person has, the history of the disorder, the extent to which physical appearance is affected, personal mobility and presence of other family members who have OI. These factors influence the way in which these individuals perceive themselves and interact with their community, social and work environment.

Since many children with OI experience a lot of pain in their early years, they often develop fear avoidance behaviour [Lethem 1983] of sudden movements, of being touched (especially by strangers), or of unfamiliar situations. Enabling people other than the parents to care for the child may be one way of teaching independent function. Starting school may be particularly difficult for children with OI and their parents, who must accept that the benefits of academic and social growth outweigh the physical risks. Children with OI find it harder to realize these benefits if they are excluded from all activities and interactions with their peers. Those who are excluded from activities risk becoming withdrawn and increasingly lonely, as in this case. Parents of mildly affected children who appear "normal," but who are at risk for fractures, fear that if people are aware of their child's disorder, they will treat the whole child as "different" and not just different in relation to risk of fracture. Inappropriate and unnecessary restrictions may be placed on the child by the school. These factors can interfere with normal development and learning of social skills. Socialization involves learning how to deal on the same level as one's peers; sometimes, children with OI deal primarily with adults and the medical community thereby missing out on the important developmental peer interactions. This can promote a tendency to adopt "the medical model" and "sick role" leading to passivity and interference with the ability to utilise self-management strategies for pain control. Also the development of an external locus of

control tends to be poorly motivated, report higher pain scores despite appearing comfortable, and tend to fail i.v. and epidural PCA therapy, because they fear taking control of any aspect of their medical care [Preble 1992]. Older children who use a wheelchair are often concerned about immobility, the social problems associated with short stature, and the pain and specific immobility due to recurrent fractures, which may be more prevalent at the time of the adolescent growth spurt; a time when psychosocial issues are also prevalent. While studies are lacking in OI, some information can be obtained by looking at data from similar populations. Payne assessed 685 adolescents with idiopathic scoliosis compared to control subjects [Payne 1997]. They found the adjusted odds ratio for having suicidal thoughts among adolescents with scoliosis, compared to adolescents without scoliosis, was 1.40 ($p = 0.04$) after adjustment for race, gender, socio-economic status, and age. The adjusted odds ratio for having feelings about poor body development among adolescents with scoliosis was 1.82 ($p = 0.001$) compared with adolescents without scoliosis after adjustment for race, gender, socio-economic status, and age. Scoliosis was an independent risk factor for suicidal thoughts, worry and concern over body development, and peer interactions after adjustment. Depression and feelings of inadequacy may be particularly problematic for teenagers with OI. Being shorter in stature, using an orthopaedic appliance, often being encased in a cast, or having different features will be most pronounced and hurtful during the teen years. All of the foregoing can influence the patients' experience of pain and need to be considered in the biopsychosocial approach.

There are many different social strategies that can be used to promote appropriate adaptation to disabling conditions like OI. Those that are self-limiting, such as withdrawal and concealment, tend to promote loss of self-esteem. One productive coping strategy is increased assertiveness, in which the individual becomes more socially active. One of the best mechanisms for promoting an adolescent's self-esteem is to encourage participation in activities that interest him or her. Adolescents need to engage in regular teenage activities such as sports, dance and music, which can all be done with care. Following school, the transition to college or employment is an extremely challenging time, particularly when the person is not completely independent. Balancing parental concerns and the young adult's desires for autonomy can create tension within the family. Overly protective parents can find it difficult to think of "letting" go of a child who has always needed their help and support. Some adolescents may have a particularly difficult time breaking away because the family has done so much for them. Other issues that occur at this stage include dating, sexuality, marriage, and having children. For the individual who is severely affected by OI, problems of immobility and social and financial dependence often occur in young adulthood. They may be dependent on family, friends, and neighbours for mobility, although some of these people may be deterred from assisting, fearing that they will be responsible for new fractures. Even individuals who are severely affected are able to live on their own with limited assistance from home

care providers. Less than ideal accessibility may contribute to physical and social isolation and restrict occupational and educational choices. They may have difficulty in obtaining health insurance or receiving allowance for legitimate work absences. This can make the provision of appropriate medical care difficult for both the patient and provider.

This man was assessed to be depressed and very lonely. During his prolonged hospital stay, he had only one visitor. We commented one day on some flowers next to his bed. He had paid a nurse to buy some for him reflecting his severe isolation. The pain experience can be heightened by psychosocial factors like these. They can also predispose to using pain as attention seeking. No cause for the exacerbation in pain was found, although there is no question that an underlying condition that could cause organic pathology exists. These factors all point towards a significant psychosocial contribution to the pain experience in this case. He was commenced on a Selective Serotonin Reuptake Inhibitor for his clinical depression by one of the Psychiatrists. They did not, however, consider the potential interaction with Tramadol that could precipitate a serotonergic crisis. We decided he required the antidepressant more than the tramadol, which was therefore discontinued.

Ketamine was used to facilitate opioid reduction in this tolerant patient. Shimoyama demonstrated the ability of ketamine to almost completely reverse morphine tolerance in mice [Shimoyama 1996]. This effect was studied via both the subcutaneous and intrathecal routes. Mu receptor activation increases NMDA receptor-gated calcium currents and is mediated by protein kinase C. This potentiation of the NMDA receptor-mediated response is a result of an increase in probability of opening and a reduction of the Mg^{2+} block of the NMDA receptor channels. This may be one mechanism by which morphine interacts with the NMDA receptor in the development of tolerance. Activation of the NMDA receptors increases Ca^{2+} influx, thereby increasing intracellular Ca^{2+} concentration, which may then initiate a cascade of intracellular events, such as the production of nitric oxide (NO) leading to the development of morphine tolerance. Mayer demonstrated that NO production and translocation of protein kinase C are some of the important intracellular events involved in the development of tolerance [Mayer 1995]. Changes are also seen in NMDAR1 mRNA production and NMDA receptors are down regulated. Ketamine is thought to modulate morphine tolerance, mainly at a spinal level, by blocking the NMDA receptor-dependant ion channel and thereby preventing the subsequent cascade of intracellular changes.

Could this drug also be an option for long-term management of his persistent nociceptive and neuropathic pain given that the use of opioids in chronic non-cancer pain is controversial? Despite the use of ketamine in clinical practice for over 30 years there is minimal data in the literature regarding long-term administration. The optimal route of administration is unknown since experimental studies are most often performed with

parenteral ketamine. While some reports describe long-term parenteral administration at home, this technique is probably impractical; in addition to the logistics of refills, s.c. ketamine appears to be irritant requiring almost daily changing of the infusion site. Can we reasonably extrapolate results obtained from systemic administration to other routes? Orally administered ketamine undergoes extensive first pass metabolism resulting in low ketamine concentrations and high norketamine concentrations in blood and tissue [Grant 1981]. We do not know how this affects the therapeutic ratio between analgesia and side effects since norketamine has significant analgesic properties [Grant 1981], and may indeed be the main molecule responsible for this effect. The optimal dose, if there is one, is yet to be found; the doses reported in the literature varying widely. Not all patients respond to ketamine. Several reports have suggested that the likelihood of response is increased in the younger patient with a shorter history of pain. In some studies in chronic non-cancer pain, barely 30% had a beneficial effect. The data also suggest a high incidence of intolerable side effects, which does not seem to improve significantly with altered dose or route of administration. Hepatic failure has been reported after daily doses of 900-1500mg orally [Kato 1995] and even low doses may cause psychotropic side effects [Jansen 1990, Ghoneim 1985]. Studies in animals have shown that the NMDA receptors are important for learning, conditioning and the functional development of sensory neuronal pathways [Morris 1994]. Pharmacological studies in humans indicate that NMDA receptors are important for sensory perception cognition and consciousness [Oye 1992, Flohr 1995]. It is not surprising that NMDA antagonists like ketamine may have psychotropic actions. Therefore, even those patients who respond to ketamine may not continue treatment due to intolerable side effects. It is interesting to note that virtually all patients reported in the literature, in whom good initial results were obtained, did not persist with ketamine in the long term. This drug does not, therefore, seem to provide a useful option for long term use in this, or perhaps any, case. Its benefit, however, is in the short term for rapid control of acute pain and in opioid detoxification.

This unfortunate young man presents with recurrent episodes of acute pain, usually due to fractures, superimposed on a background of persistent bone pain from old and healing fractures. Due to previous experience he does display some fear avoidance behaviour and will sometimes present to medical care without pathology because he is "concerned that he has done something". It is possible that due to his social isolation, some of these presentations provide him with some social interaction: he lives alone in a university room and seems to have very little social life. None of his family visit during his admissions and he is reluctant to discuss them in great detail. As such we have little in the way of background regarding family history and whether siblings are affected and to what degree. Although there was no radiological evidence of new fracture on this admission, the possibility of missing one in the presence of gross anatomical distortion is significant. Escalating doses of opioids did not

seem to control his pain, which remained at the same level. A neuropathic element could have explained this opioid insensitivity but a blinded i.v. lidocaine trial showed no improvement. While this is not definitive, it makes a significant neuropathic element less likely. Despite aperients, increasing doses of oxycontin were causing severe constipation. This was the rationale for changing to fentanyl, which is reported to cause less constipation. By using a fentanyl PCA to facilitate the changeover, dose requirements could be found in the face of uncontrolled pain. Multiple different opioids were not administered together, although there is some suggestion that this may be a reasonable treatment due to slightly different receptor affinities. NSAIDs were tried during the acute phase both for their direct benefit in bone pain and for their opioid sparing effect. If beneficial they would have been continued, however, in the light of minimal analgesic effect it was thought that the potential adverse effect on osteoblast activity outweighed any potential benefit. Ketamine proved very beneficial in this case to reduce opioid requirements and reduce tolerance. The successful long-term management of this young man will need coordination of multiple specialities including pain medicine, orthopaedics, psychology, psychiatry, physiotherapy, occupational therapy, social work, rehabilitation and the general practitioner. The activities of daily living will need re-assessment and appropriate supportive measures offered to help this man remain independent within the community and pursue his desired university Law degree. Ongoing psychiatric support and psychological counselling are helping him come to terms with his condition and its consequences on his lifestyle.

With improved medical management, more patients with OI are surviving longer. This leads to a greater number of injuries and an increased incidence of chronic pain with acute exacerbations. While there is little doubt about the presence of nociceptive input, given the nature of OI, psychosocial issues are likely to contribute greatly to the overall pain experience in these patients. It is important that these are actively sought and assistance given where possible.

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Faculty of Pain Medicine

PROFESSIONAL DOCUMENTS

P = Professional

PS = Professional standards

- PM1 (2002) Guidelines for Trainees and Departments Seeking Faculty Approval of Posts for Training in Pain Medicine
- PM2 (2001) Requirements for Multidisciplinary Pain Centres Offering Training in Pain Medicine
- PM3 (2002) Lumbar Epidural Administration of Corticosteroids
- PS40 (2000) Guidelines for the Relationship Between Fellows and the Healthcare Industry
- PS41 (2000) Guidelines on Acute Pain Management
- PS45 (2001) Statement on Patients' Rights to Pain Management

College Professional Documents adopted by the Faculty:

- PS3 (2003) Guidelines for the Management of Major Regional Anaesthesia
- PS4 (2000) Recommendations for the Post-Anaesthesia Recovery Room (Adopted February 2001)
- PS7 (1998) The Pre-Anaesthesia Consultation (Adopted February 2001)
- PS8 (1998) The Assistant for the Anaesthetist (Adopted February 2001)
- PS9 (2001) Guidelines on Conscious Sedation for Diagnostic, Interventional Medical and Surgical Procedures (Adopted May 2002)
- PS10 (1999) The Handover of Responsibility During an Anaesthetic (Adopted February 2001)
- PS15 (2000) Recommendations for the Perioperative Care of Patients Selected for Day Care Procedures (Adopted February 2001)
- PS18 (2000) Recommendations on Monitoring During Anaesthesia (Adopted February 2001)
- PS20 (2001) Recommendations for Responsibilities of the Anaesthetist in the Post-Operative Period (Adopted February 2001)
- PS31 (1997) Protocol for Checking the Anaesthetic Machine (Adopted February 2001)

Obituaries

Emanuel M ('Manny') Papper MD PhD Florida, USA FANZCA – Honorary Fellow, 1996

A GIANT OF THE 'SECOND GENERATION'

Emanuel M ('Manny') Papper (1915–2002) died at age 87 on December 3, 2002 thus ending an extraordinary career as a leading academic anesthesiologist, exceptional contributor to research in anaesthesia and medicine, outstanding educator, respected medical and University administrator, distinguished military anesthesiologist in World War II, friend of presidents, kings and other influential individuals, humanitarian, mentor and priceless friend.

His qualifications, honorary degrees and academic appointments spanned an astonishing 64 years:

- MD (1938 New York University)
- PhD (1990, University of Miami)
- Honorary Doctorate of Science (University of Vienna, Austria)
- Honorary MD (University of Turin, Italy)
- Honorary MD (University of Uppsala, Sweden)
- Honorary Fellow, Royal Society of Medicine of England
- Honorary Fellow, Royal College of Anaesthetists
- Honorary Member of the Society of Anesthesiologists of Japan, Denmark, Latin America, France, Israel, Finland and Sweden
- Honorary Member, Australian Society of Anaesthetists
- Honorary Consultant, Royal Prince Alfred Hospital, Sydney
- FANZCA (1996)
- Fellow with renowned renal physiologist Homer Smith (1940)
- Resident in Anesthesiology with E.A. Rovenstine (1940–42)
- Associate Professor at New York University (1949)
- Professor at Columbia University (1949–69)
- Vice President for Medical Affairs and Dean, University of Miami (1969–81)
- Professor of Pharmacology, University of Miami (1974–81)
- Professor of Anesthesiology, University of Miami (1969–2002)

His Fellowship with Homer Smith kindled an interest in anaesthesia and renal function, with some important early publications still quoted in the literature. An even more interesting relationship developed with E. A. Rovenstine, an early pioneer in the use of nerve blocks for chronic pain at the New York University/Bellevue Hospital. After his residency with Rovenstine, Papper continued to be close to his mentor and in 1948 the pair published a very forward looking paper on what we now know as the speciality of Pain Medicine. A quotation from the paper follows:

"Events in the changing medical world have made it imperative that we accept the challenge of pain occurring outside the surgical amphitheatre. Such a concept fully justifies an anaesthesia clinic on the therapy of pain".

Papper later became the fifth Rovenstine Memorial Lecturer and further pursued the above theme in this lecture (Anesthesiology 1967; 28:1074–84) and in his PhD thesis in English Literature, awarded at the age of 75 and titled "Pain, suffering and anaesthesia in the romantic period" (the era including the late 1700's and first half of 1800). In his thesis he examined the literature of this era and concluded "*attention to individuality by the romantic poets, essayists and philosophers was crucial to preparing the way for change in clinical medicine, designed to relieve pain and suffering and to prevent it where possible*".

In scientific and professional societies he was involved in an extraordinarily broad range at the highest level: Co-founder

and First President, Association of University Anesthetists of the USA; Life Member, American Society for Pharmacology and Experimental Therapeutics; Life Member, American Pain Society; President, American Society of Anesthesiologists; Chairman, Council of Deans, Association of American Medical Colleges; Vice President, World Federation of Societies of Anesthesiologists.

Professor Papper delivered over 25 eponymous lectures in his career, including the first William T.G. Morton Memorial Lecture Harvard Medical School (1982); the Joseph Clover Lecture, Royal College of Surgeons (1964) and the "Living Legend" Lecture, University of Chicago (1990).

He received many awards and honours, including the E.M. Papper Day in Dade County, Florida (1985); Outstanding Educator of America (1974); Medal of Honour of the City of Paris, France (1972).

He served on the Boards of Directors of numerous community organizations including the National Foundation for the Advancement of the Arts and the National Parkinson Foundation.

His publication list includes over 250 scientific papers published in an extraordinarily wide range of basic science, general medical, surgical, anaesthetic, physiology, pharmacology and other journals. He also authored four texts and served as editor of a further three texts.

Papper "retired" for only one day which he described as the worst day of his life. He asked the new head of the Department of Anesthesiology at the University of Miami if he could serve any useful purpose and was promptly allocated an office. For more than 20 years he continued to work at this institution, in latter years serving as mentor to registrars and also to staff. He told me that his secret to successfully helping so many people as an "old professor in a new professor's department" was that he never made the decision but rather helped people to see the options they had and allowed them to discuss the advantages and disadvantages of each option. He was a very good listener and a very wise man.

In addition to his "later life PhD" he maintained a high interest and knowledge in the science of anesthesiology. For example, in the late 1980's he was invited to give a speculative lecture at a European Congress at which I was speaker. One of his astute observations was that nobody had ever carried out kinetic and dynamic studies after direct injection of anaesthetic agents into the carotid artery. He was absolutely correct and it was not until 2002 that a paper was published by Laurie Mather entitled "CNS site directed carotid arterial infusions" (*Anesthesiology* 2002; 97:418-28).

Papper has been described as a leader of the "second generation" of academic anesthesiologists who followed the pioneers such as Ralph Walters, Henry Beecher, E A Rovenstine, Sir Robert Macintosh, William Mushin and others. Like Beecher, his impact was made far beyond anesthesiology as evidenced by the breadth of his publications, his prominence as a Medical School Dean and his recognition by the general community. He was also very well connected, being friendly with several presidents, kings and other influential people. He received a very handsome rocking chair from John F Kennedy and did much thoughtful mentoring in this chair in his office in the University of Miami, where I visited him several times and benefited from his advice.

When I worked at Stanford University in the early 1970's Papper was still in his hey day and I became aware of his dominant influence in academic anesthesiology. My colleague, Dick Mazze, frequently noted that he planned to ask Professor Papper's advice on some matter. Ronald Katz at UCLA confided in me that he would not dream of making a major career decision without consulting Professor Papper.

Manny also had great standing at the level of the National Institute of Health in the USA and played the key role in negotiating for the NIH to provide the first significant research funding in anesthesiology in the 1960's. This opened up a "golden era" for research in the specialty and led to many key advances in clinical practice.

ANZCA Fellows probably first became aware of Papper as a result of a paper that he wrote with Richard Kitz (later Professor at Harvard) on the pharmacokinetics of inhalation anaesthetics. He used a balloon analogy to explain changes in partial pressures and commented to me that he "traveled around the world on a balloon" as a result of this paper – probably one of his lesser contributions. Partly as a result of a visit to Australia to lecture on this topic he became very good friends with Nuffield Professor Douglas Joseph.

ANZCA recognised Papper's enormous contributions by electing him to Fellowship which was due to be awarded during the World Congress of Anesthesiologists in Sydney in April 1996. However at the last minute Papper was prevented from attending by the unexpectedly early delivery of twin grandchildren – an event that he was determined to attend. In the end the FANZCA was presented in a small personal ceremony in New Orleans in October 1996. Nevertheless, Papper's presence was felt at the special concert by the Sydney Symphony Orchestra during the World Anesthesiology Congress. "Kakadu" by Peter Sculthorpe was a major item on the program. This symphonic poem was commissioned by Papper in honour of his beloved wife, Patricia.

There are many lessons that we can learn from Manny Papper's remarkably rich professional and wider life. He was truly a giant of unparalleled influence over an unmatched period of time.

Michael J Cousins

Michael John Bookallil

NSW FFARACS 1961, FANZCA 1992, FRCA 1962

Michael Bookallil was full of life and while it is painful for us to see the life gone from him, it is a blessing that his passage was sudden. It's hard to imagine how he could have tolerated a gradual decline, either of mind or body. He died, happy, in the place he loved the most, Royal Prince Alfred Hospital.

Michael would often say that he thought he was hopeless at school, his mother describing him as a "slow learner". Indeed, despite a near perfect understanding of English grammar, his spelling and writing were atrocious and he said he preferred getting the strap from the primary school nuns rather than trying to learn to spell properly. But he wasn't hopeless. Rather, he was a man of great intelligence and outstanding memory with amazing ability at observation. He read extensively. Perhaps he learned one of his greatest lessons from the Marists at St Josephs. Michael often quoted the first lines of the College Prayer – Teach me, O Lord, to aim high and not to be content with mediocrity. "In all humility..." he'd say, and then he'd go on to compare himself with Socrates or Einstein and when somebody suggested he was being grandiose he'd retort that he was striving for the highest ideals.

Michael's life – his work – was, for him, a game. He said so himself. His opponent was mediocrity, not just in himself but in everyone. If you asked him why he'd say "I was hopeless at sport and a failure at relationships so I had nothing better to do." And he played his game hard. Even as a resident medical officer (St Vincent's and Lewisham Hospitals) and during his anaesthetic training (Royal Prince Alfred and Royal Alexandra Hospital for Children) he introduced new methods of anaesthesia and finished his training in record time, obtaining fellowships of both the FARACS and FARCS. Michael went on to play a major role, over several decades, in the refinement and development of anaesthesia and post-operative care for various types of major surgery at RPAH including vascular, neurosurgery and liver transplantation. He volunteered to go to Vietnam as part of the hospital's surgical team during the war. He was heavily involved in research mostly at RPAH and the University of Sydney but also earlier at Queens University in Belfast, The Royal College of Surgeons of England, Imperial College London and the Royal Adelaide Hospital. He has more than 65 publications to his name. He taught extensively at all levels from undergraduate to post-fellowship anaesthesia and from 1966 he ran or helped run the ANZCA Fellowship courses in New South Wales, his death occurring in the middle of this year's Part II refresher. He played a role in many hospital and university committees. The game, for him, was to do all these things to the highest possible standard. He'd even tell the patients it was his game. One transplant patient arriving in theatre was heard to say to him "You're going to win today, aren't you!". Yet, if you gave him the impression you were trying to better him at something he'd say, "it isn't a competition". His aim was to get everyone to play on his team.

Sometimes he went about it in ways other people found strange and annoying. His style of teaching put many people off but those who saw beyond his disregard for niceties found within him an unrivalled source of skill and knowledge. He never let any of us get away with sloppiness, neither of thought nor of action. He also often irritated the very people he wanted for his team. His excuse was always that he was a "social cripple". Despite this, the people with whom he conversed, taught, laughed, jostled, and even fought number in the many thousands and most would call him friend. He seemed to know everyone and had close associations with many of the world's icons of medicine. He maintained contact with staff who left the hospital decades ago. Even his fiercest critics seemed to have considerable respect for him. His eccentricity and his extraordinary contribution to anaesthesia has, of course, made Michael himself into an icon.

He was incredibly generous. He had time for everyone, even those trying to shun him. He read a vast quantity of the medical literature and passed on the best bits to the rest of us. People all over the world would email him with questions about work, music, philosophy and even about Michael himself. He always responded in detail. He gave hours of time every week to undergraduate and postgraduate education. His enjoyment of reunions, farewells, conferences and the like was obvious and he contributed to such functions immensely. The examples of his generosity and loyalty are legion.

All who met him would remember his stories. How could we ever forget? If you heard the words "one time" you knew what you were in for. His long-time friend and colleague Robert Woog jested that Michael's stories had no beginning, no end and no point. As busy as you were you might suddenly find yourself immersed in some anecdote he was recounting and there was no escape. The punch line for one story would, more often than not, be the start of another. Often his stories did have a point, however, and there could be much to learn if you were prepared to listen.

Michael was an accomplished philosopher. He especially liked Plato and many times he mentioned the analogy of Plato's cave. Michael had many of his own analogies and one of his favourites was the door scale. He'd take some unsuspecting student or trainee and make it very clear where he or she stood in the scheme of things. Walking over to the operating theatre door he'd point to the top and say "this is what we are aiming at – excellence". Then, literally on hands and knees on the floor of the theatre, he'd put his finger one inch from the bottom and say "this is where I am". Then he'd drop his finger another 3/4 inch. "And this is where you are". The door is an analogy of his life.

The Anesthesiology Email Discussion List was a big part of Michael's life since the early-90s. The plethora of messages about Michael, both after his death and after his cardiac arrest a year beforehand, bear tribute to his enormous influence on the profession.

Michael shaped the lives of so many people all over the world, many of whom he never met. For that, and for so many other things, we will miss him.

John Loadsman

Dr. Henry (Harry) Michael Bray **FFARACS 1957, FANZCA 1992**

Dr. Harry Bray worked at St. Vincent's Hospital in Melbourne for 32 years and during that time made some great contributions. He graduated in Medicine at Melbourne University in 1948 and following a couple of years of residency became an Anaesthetic Registrar at the Royal Women's Hospital in Melbourne, then at Launceston General Hospital and finally completed his training at St. Vincent's Hospital in Melbourne. He gained his FFARACS in 1957 and went to obtain post Fellowship training at St. Thomas' Hospital in London. While in the U.K. he took the opportunity of visiting many of the great Departments of Anaesthesia including St. Bartholomew's, The Hammersmith, Radcliffe Infirmary in Oxford and the Edinburgh Royal Infirmary.

In the late 50's he returned to St. Vincent's and became Deputy Director of Anaesthesia with a major role in the development of cardiopulmonary bypass for open heart surgery. He did this with Mr. John Clareborough who was one of the pioneers of cardiac surgery in Australia. During 1960-63, in the early stages of the development of Open Heart Surgery, he spent many long hours conducting animal research so that he could apply these techniques safely to patients. He continued to introduce the many advances that occurred in cardiopulmonary bypass up until he retired from St. Vincent's in 1989

Harry also had a long association with Neurosurgical Anaesthesia. He worked in this area for over 30 years and introduced many of the advances in this area to St. Vincent's Hospital. He was remembered particularly for the use of whole body hypothermia for complex cerebral aneurysm surgery, where patients were immersed into a water bath and then operated upon, hoping at all times that there was no overshoot to a body temperature, which might precipitate ventricular fibrillation.

He always had an enquiring mind and was involved with many clinical studies to improve the quality of patient care, particularly in relation to cardiopulmonary bypass. He had a habit of recording information in small notebooks, even doing that recently when he came to St. Vincent's for a refresher course in the latest and greatest in anaesthesia. Many of those notes would be interesting reading today.

Harry was a great character, always an interesting conversationalist. His experience was broad and he travelled to many great institutions in the world to gain more knowledge of his areas of expertise.

Harry retired from St. Vincent's Hospital in 1989 but continued to work part time in anaesthesia until his sudden death in December 2002, at the age of 76 years. His wife Ann, and 6 of his 7 children survive him.

Michael Davies

Graeme Alexander Donaldson **27.1.45 – 22.10.02**

Graeme Donaldson passed away peacefully on Tuesday 22.10.02, aged 57, after a long brave battle against a persistent and powerful adversary.

Graeme studied Medicine at Monash University where he graduated in 1969. He met Wil, a nurse at Prince Henry Hospital, in his student years. They married in 1971 and were to remain lifelong companions. Graeme's early house officer years were spent at Prince Henry Hospital, and at Geelong. Wishing to seek experience further afield, Graeme and Wil proceeded to England, where Graeme studied and worked in Anaesthetics at Winchester Hospital. He sat and passed his anaesthetic primary in 1973 and continued to work in England for another year. Samantha was born during this time.

In 1975, Graeme and family returned to Australia where Graeme took a position as a training registrar at Prince Henry Hospital, and spent time at the RWH and the RCH. He passed his Fellowship examination in 1976 to become a Fellow of the Faculty of Anaesthetists, Royal Australasian College of Surgeons. This was converted to FANZCA in 1992.

Graeme began Consultant Anaesthetic practice in 1977 in Shepparton, Victoria. Initially, as the only specialist in the area, he supported both public and private practice, and had significant input into the ICU. Alexandra and Jacqueline were added to the family during these years.

The Donaldson family moved to Townsville in 1987 and Graeme took up a position in private practice with VMO sessions at Townsville General Hospital. During this time, Graeme displayed the knowledge, experience, and commonsense needed to cope with difficult workloads whilst dealing with differing personalities with effectiveness and grace.

Graeme and Wil moved to the Sunshine Coast in 1998 where Graeme joined the Sunshine Coast anaesthetic Group as it's locum. Instead of slowing down, Graeme continued to practice with intense enthusiasm, skill, and compassion. It was this compassion that led him on medical trips with Operation Rainbow to the Philippines, and also to Vietnam. It was on

return from Vietnam that Graeme was presented with a pulmonary embolus and this heralded his diagnosis of leukaemia.

For nearly 2 years Graeme struggled courageously against his illness. When questioned, he would calmly allay people's fears about his own wellbeing, insist all would be well, and go on to inquire how he could help them. This was but the final expression of all that his life symbolised – courage, compassion, dignity, humility and honour.

Whilst his non medical interests included 4 wheel driving and camping, music, Aussie Rules and red wine, Graeme, throughout his whole life, had been totally devoted to his family and immensely proud of them all. But none more so than daughter Alexandra who studied for her Anaesthetic Primary through her Dad's illness and passed just 2 months before Graeme finally succumbed.

Graeme has thus been cheated of the opportunity to respond to the wonderful exhortation of that great Welsh poet, Dylan Thomas, where he said,

“Do not go gentle into that good night
Old age should burn and rave at close of day
Rage, rage against the dying of the light”

And so we, colleagues and friends, have lost. To Wil and the girls, their loss is immeasurable and our sympathy is extended to them.

Daryll Koch

Dr Edwin (Ted) Robert Fawcett, New Zealand – FFARACS 1961, FANZCA 1992

Ted Fawcett was born in Auckland on 26/1/27. He obtained a B Sc (Auckland) in Zoology in 1947 and then immediately enrolled in medicine at Otago University alongside many returned servicemen, graduating MB ChB (Otago) in 1952. He often spoke of the influence that Sir John Eccles had on him as a student. Eccles fresh from the laboratory, where his Nobel Prize research was being done, would burst in to give a breathless lecture on the latest results of action potentials and electrolyte fluxes. This stimulus provided a life long interest in physiology and scientific medicine for Ted. It would have to be said that such stimuli were not for everyone and many students were not suited to this teaching style.

On a fifth year working holiday attachment at Tokanui Hospital he met Kath who was nursing there and they married immediately he graduated. He did House Surgeon and Registrar years in Waikato Hospital and went to England where after a 3 month course at the Royal College of Surgeons in London he had passed both Primary and Final Examinations (FFARCS1958). He worked briefly as a locum in London before joining the Research Department of Anaesthetics at the College as a Wellcome Research Fellow for a year under Professor Woolmer, where he focused on developing CO2 electrodes. He returned to take up the first full-time anaesthetic position in New Plymouth in 1960. The frustrations of not being able to get appropriate equipment easily and the inability to pursue his scientific interests in the physiological basis of anaesthesia led him to accept an appointment in the Department of Physiology at Otago University in Dunedin in January 1964 where his special interest was cardiovascular physiology. At the time there were 4 staff members to teach 300 students. As well he obtained a position as a visiting anaesthetist for one day a week at Dunedin Public Hospital just across the road. He retired from both these positions in 1991 though he helped out both Departments when needed during 1992 as well. He had a sabbatical year (1971 – 72) in London in the Engineering in Medicine Laboratory of the Department of Electrical Engineering under Professor Sayers earning the DIC (1973), and another in Leeds in Physiology with Professor Linden (1979 – 80). He was an Examiner for our Faculty in Physiology 1988 – 92 and taught on the Dunedin Primary Courses throughout their existence mainly on physiological measurement. Ted maintained a very strong interest in his local church where he was a lay reader for 40 years.

Students and colleagues remember Ted as someone who stressed logical reasoning above all else and did not tolerate fuzzy thinking particularly when there was no attempt to understand fundamental mechanisms. His lecture style was rather dry but his notes a model of clarity. He maintained a passion for local anaesthesia throughout his life and was renowned for his abdominal field blocks for laparotomies. He advocated these techniques because they reduced post-operative nausea and vomiting and because of decreased post-operative analgesia requirements. He brought his physiology interests to the anaesthetic arena proving to be a stimulating colleague and teacher, and, as with many a pioneer anaesthetist, those who followed had a tale to tell of memorable physiologic and anaesthetic occasions.

Ted died at home on 5th January 2003

Barry Baker

Peter John Forgan **FANZCA 2002**

Peter was born in Port Pirie, South Australia, in 1934 and received his early education there. He completed his schooling at St. Peter's college in Adelaide.

He attended the Medical School of the University of Adelaide, on completion of which he did his internship and residency at the Royal Adelaide Hospital. This was followed by a time in general practice in the river town of Mildura.

As there was no anaesthetic course in Adelaide yet, when Peter decided to specialise in anaesthesia in 1963, he had to go to Melbourne. He successfully obtained the diploma of the Faculty of Anaesthetists, RACS, in 1967 and returned to Adelaide.

He entered private practice with the firm Stace, Ferris and Waterhouse on his return and stayed with them until he retired. He also entered public practice at the Royal Adelaide Hospital and the Adelaide Children's Hospital, as a Visiting Anaesthetist. After 24 years with the Adelaide Children's Hospital, Peter was awarded the title of Emeritus Senior Consultant in recognition of his length and quality of service.

The newly formed Australian and New Zealand College of Anaesthetists awarded Peter its diploma in 1992.

Peter contributed to the Faculty of Anaesthetists, RACS, as a member of the SA Regional Committee and was Honorary Secretary from 1973 to 1975.

The hallmark of Peter's anaesthesia was its high standard. He was well regarded where-ever he practiced and he attempted to apply the Faculty/College standards in everything he did. He took these standards outside Australia, to Southeast Asia and the Pacific region with the Cranio-facial Unit and Interplast Australia.

As a friend and colleague, Peter was appreciated because he was always ready to do the extra case or call to help out. His positive attitude and sense of humour endeared him to all.

A loving family surrounded Peter right to the end. His wife Toni-Anne, two sons, two daughters and nine grand children survive him. We extend our sympathy to the whole family on their sad loss.

Dave Fenwick

Ronald Justin Henry Tapson **Tasmania FFARACS 1966, FANZCA 1992**

Ron Tapson, a well known Hobart anethetist, died after a short illness on the 30th December, 2002.

Ron was born in Randfontein, South Africa in 1927. After a very successful school career, at the age of 17, he enlisted in the South African Air Force in June 1944. Although he wanted to train as a pilot, he undertook training as a Tail Gunner, as he was told he was unlikely to see active service if he trained as a pilot. There were plenty of vacancies for Tail Gunners. He was discharged in 1946 and began his medical studies in 1947.

In 1952, he married Helen, who was to be his life's companion. In 1953 he qualified with a Bachelor of Medicine & Surgery from Witswatersrand University and started working as a GP in a mining community. 1957 was the beginning of his anaesthetic training and in 1962 he was admitted as a Fellow of the Faculty of Anaesthetists of South Africa.

In 1964, the family, now with four children, moved to Launceston in Tasmania where Ron established the ICU unit at the Launceston General Hospital. In 1965 Ron and Helen were naturalized as Australian Citizens. In 1966 he gained his FFARACS by examination. In 1968 they had moved to Brisbane where Ron worked at the Royal Brisbane Hospital.

However, Tasmania beckoned and Ron and the family moved to Hobart where he joined the Hobart Anaesthetic Group practice, started by Tom Thomson of Thomson, Nicholson & Bond in 1957. He was to be part of that practice from 1969 until he retired in 1992 when he also gained his FANZCA. The practice now has 13 members.

As well as private practice, Ron was first an honorary and later a visiting Medical Officer at the Royal Hobart Hospital. He was a very humble man. Well read, interested and an extraordinarily able and caring anaesthetist. But the comment most often used to describe Ron was that he was a gentleman, in the true sense of the word. He had a wide range of interests, some of which became passions. At various stages of his life, he played competitive squash, skied, fished for trout and sailed, but flying light aircraft and gliding appeared to be his greatest passions. In later life he took up golf and because of Helen's ill health he discovered he had domestic skills.

He is survived by his wife Helen, his 4 children and his 10 grandchildren.

Robert Bown

Australian and New Zealand College of Anaesthetists

ABN 82 055 042 852

Australasian College for Emergency Medicine

ABN 76 009 090 715

Review PS39 (2003)

MINIMUM STANDARDS FOR INTRAHOSPITAL TRANSPORT OF CRITICALLY ILL PATIENTS

Critically ill patients may have absent or small physiological reserves. Adverse physiological changes in these patients during intrahospital transport are common and can be life-threatening. Ventilator-dependent and haemodynamically unstable patients are at particular risk. Careful planning is required to move these patients between hospital facilities such as operating theatres, ICU, Emergency Department, imaging rooms, and wards. Such intrahospital transport is usually elective, but a need for urgency must also be anticipated (such as moving the patient to the operating theatres after a diagnostic procedure).

1. Protocol

- 1.1 Relevant staff should formulate their hospital's protocol of intrahospital transport of critically ill patients. The protocol should be made widely known and available.
- 1.2 The transport itself must be justified. Whatever benefits of proposed interventions must outweigh the risks of moving the critically ill patient and those posed by the interventions themselves.

2. Equipment

- 2.1 Equipment must be dedicated to intrahospital transport.
- 2.2 The equipment should be durable, and trolley linked devices must be able to enter lifts and pass through all doorways en route.
- 2.3 All equipment must be able to function in the specific intervention area (e.g. a magnetic resonance imaging room) and facilities for remote patient monitoring should be available where required. Gas, suction, and electrical supplies at the destination must be present and compatible.
- 2.4 No equipment should be placed on the patient; specially designed receptacles or transport trolleys are useful.
- 2.5 Basic monitoring of ECG, heart rate, blood pressure (by invasive or an automated

non-invasive monitor), and oxygen saturation by pulse oximetry must be used for all patients. A capnometer must be used to monitor all patients receiving mechanical ventilation.

- 2.6 A defibrillator and a suctioning device must be available.
- 2.7 A portable ventilator with a disconnect alarm is required for ventilator-dependent patients. Nonetheless, a manual resuscitator bag must always be available. Facilities to deliver PEEP and different modes of ventilation are necessary for some patients.
- 2.8 Infusion pumps are highly recommended for accurate administration of drug infusions. They should have alarms set appropriately.
- 2.9 Appropriate fully charged, spare battery packs for electrically driven devices must be available.
- 2.10 Equipment to secure the airway, and emergency drugs, analgesics, sedatives, and muscle relaxants must be available.
- 2.11 A procedure must be implemented to ensure that all intrahospital transport equipment is readily accessible and regularly checked.

3. Staffing

- 3.1 Key personnel for each transport event should be identified. The transport team should consist at least of an appropriately qualified nurse, an orderly, and an appropriately trained doctor.
- 3.2 Each team must be familiar with the equipment and be sufficiently experienced with securing airways, ventilation of the lungs, resuscitation, and other anticipated emergency procedures.

4. Pre-Departure Procedures

- 4.1 The transport team must be freed from other duties.

- 4.2 The receiving person or staff at the destination must be notified, and the arrival time must be clearly understood.
- 4.3 All pieces of equipment must be checked, and notes and imaging films gathered. An example of a checklist is listed below. Individual responsibilities for checking equipment must be defined.
 - 4.3.1 The monitors function properly and the alarm limits are set appropriately.
 - 4.3.2 The manual resuscitator bag functions properly.
 - 4.3.3 The ventilator (if used) functions properly; respiratory variables and alarms are set appropriately.
 - 4.3.4 The suction device functions properly.
 - 4.3.5 Oxygen (\pm air) cylinders are full.
 - 4.3.6 A spare oxygen cylinder is available.
 - 4.3.7 Airway and intubation equipment are all available and working.
 - 4.3.8 Emergency drugs, analgesics, sedatives, and muscle relaxants are all available.
 - 4.3.9 Additional drugs are made available if indicated.
 - 4.3.10 Spare IV fluids, inotropic solutions, or blood are available if needed.
 - 4.3.11 Spare batteries are available for all battery-powered equipment.
 - 4.3.12 Chest tube clamps (if an underwater chest drain is present) are available.
 - 4.3.13 Patient notes, imaging films, and necessary forms (especially the informed consent form) are available.

5. Patient Status

- 5.1 Final preparation of the patient should be made before the actual move, with conscious anticipation of clinical needs. Examples include giving appropriate doses of muscle relaxants or sedatives, replacing near empty inotropic and other IV solutions with fresh bags, and emptying drainage bags.
- 5.2 The patient must be reassessed before transport begins, especially after being placed on monitoring equipment and the transport ventilator (if used). Transport preparations must not overshadow or neglect the patient's fundamental care. An example of a brief check on the patient is listed below.
 - 5.2.1 Airway is secured and patent.
 - 5.2.2 Ventilation is adequate; respiratory variables are appropriate.

- 5.2.3 All equipment alarms are switched on.
- 5.2.4 Patient is haemodynamically stable
- 5.2.5 Vital signs are displayed on transport monitors and are clearly visible to transport staff.
- 5.2.6 PEEP/CPAP (if set) and $F_{I}O_2$ levels are correct.
- 5.2.7 All drains (urinary, wound, or underwater seal) are functioning and secured.
- 5.2.8 Underwater seal drain is not clamped.
- 5.2.9 Venous access is adequate and patent.
- 5.2.10 IV drips and infusion pumps are functioning properly.
- 5.2.11 Patient is safely secured on trolley.

6. In-Transit Procedures

- 6.1 A best route should be planned. Lifts should be secured or reserved beforehand.
- 6.2 Adequate communication facilities during transit and at the destination must be available.
- 6.3 The status of the patient must be checked at intervals, especially if the journey takes considerable time. Any change in the patient's condition, unexpected event, or critical incident, must be acted upon immediately.

7. Arrival Procedures

- 7.1 On arrival at the destination, the receiving monitoring, ventilation, gas, suction, and power facilities are checked if the patient is to be transferred from the transport facilities.
- 7.2 The patient must be assessed when the new monitors, ventilators (if used), gas and power supplies are established.
- 7.3 If another team assumes responsibility of care, a complete hand over is given to the team leader. The transport staff must remain with the patient until the receiving team is fully ready to take over care.

8. Documentation

The clinical record should document the patient's clinical status during transport until handover occurs at the destination.

9. Quality Assurance

The process of intrahospital transport of patients should be continually evaluated to identify system problems and recommend improvements.

These guidelines should be interpreted in conjunction with the following document: IC-10 Minimum Standards for Transport of Critically Ill Patients.

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Australian and New Zealand College of Anaesthetists

ABN 82 055 042 852

FACULTY OF PAIN MEDICINE

ABN 76 009 090 715

Review PS3 (2003)

GUIDELINES FOR THE MANAGEMENT OF MAJOR REGIONAL ANALGESIA

I. General Principles for the Management of Major Regional Analgesia

- 1.1 Major regional analgesia (eg epidural, intrathecal, or nerve plexus) must only be initiated by anaesthetists with appropriate training and experience in the technique, or by trainees under appropriate supervision. All persons who undertake such procedures must understand the relevant anatomy, physiology, pharmacology and potential complications of the particular procedure and the contraindications to its use. They must be able to recognise and promptly treat any complications.
- 1.2 Selection of the appropriate technique (nerve plexus, epidural, intrathecal etc) and site (e.g. lumbar vs thoracic epidural, interscalene vs axillary brachial plexus block) should be based on individual patient history and analgesic requirements.
- 1.3 Complications of major regional analgesic techniques can occur due to the physiological changes that may result from nerve blockade, adverse effects from the drugs administered (local anaesthetic, opioid and adjuvant medications), or problems associated with insertion of the needle and/or catheter.
- 1.4 The anaesthetist or trainee instituting a major regional analgesic technique must have an assistant with the appropriate training.
- 1.5 Informed consent must be obtained from the patient prior to the institution of any regional analgesia and prior to any sedation.
- 1.6 All techniques should be performed using appropriate infection control measures. Gowns, masks and gloves should be worn during insertion of epidural or spinal needles/catheters.
- 1.7 Intravenous access must be secured prior to commencement of any major regional analgesic technique and maintained for the duration of that analgesia.
- 1.8 Patients must be monitored in accordance with Professional Documents PS18 Recommendations on Monitoring During Anaesthesia and PS41 Guidelines on Acute Pain Management, as appropriate.
- 1.9 The responsible anaesthetist must be in attendance throughout the institution of the technique, until a satisfactory blockade has been obtained, the patient is stable and the potential for immediate complications has passed. If the technique has been instituted for anaesthesia as well as subsequent analgesia, an anaesthetist must be present for the duration of that anaesthetic.
- 1.10 Major regional analgesia remains the responsibility of the anaesthetist initiating the technique. The anaesthetist may delegate subsequent management of the patient to another medical practitioner or registered nurse or to a pain service, provided that these personnel have received appropriate training and provided the anaesthetist is satisfied with the competence of the person(s) to whom management has been delegated. This competence includes, but is not limited to, an understanding of the technique, the drugs and equipment used, monitoring requirements and the recognition and management of any side effects.
- 1.11 A record of the technique, including method, drugs (and dose) used, and any complications or problems encountered, must be made in the patient's medical record by the responsible anaesthetist. All analgesic drugs must be prescribed by an anaesthetist.
- 1.12 A record of the instructions given for the subsequent management of the patient (including drug orders and monitoring requirements) must also be made by an anaesthetist and form part of the patient's medical record.
- 1.13 Nursing staff may play a key role in the management of the patient after the major

regional analgesia has been established and the patient is stable (see 1.10 above). Appropriate ongoing education and accreditation of relevant nursing staff are essential.

- 1.14 Appropriate written protocols and procedures must be in place for the continued management of each technique. Formal institutional protocols and guidelines for each technique are recommended.

2. Specific Principles for the Continued Management of Major Regional Analgesia in Hospital Wards

In addition to the general principles listed above, the safe and effective continued management of major regional analgesia, using repeated intermittent bolus doses or continuous infusions of analgesic drugs via a catheter, requires the following:

- 2.1 The availability of suitable levels of nursing care and the presence of appropriately trained nursing staff.
- 2.2 The clear labelling of any catheter in order to minimise the risk of accidental administration of other substances not intended for analgesia.
- 2.3 When infusion pumps are utilised, they should be dedicated to use for continuous regional (epidural and major plexus or nerve) analgesia infusions only and clearly marked as such. The maximum rate of infusion that can be delivered by the pump should be limited to that suitable for such applications in order to minimise the risk of inadvertent high infusion rates and consequent delivery of excessive amounts of analgesic drug.
- 2.4 Written protocols and guidelines must be in place for the continued management of the technique. Tailoring of analgesic regimens to the individual patients requires that regular assessments of adequacy of analgesia and any adverse effects of analgesic drugs or techniques are performed and documented.
 - 2.4.1 The following parameters should be monitored and recorded on a regular basis: pain score, blood pressure, heart rate, temperature, respiratory rate, sedation score, oxygen saturation, sensory and motor function.
 - 2.4.2 Proper assessment and control of pain requires patient involvement and the use of self-reported measures, and frequent assessment and reassessment of pain intensity and the effect of any intervention. Pain should be assessed both at rest and during activity. Unexpected levels of pain, or pain that suddenly increases, may signal the development of a new medical or psychiatric diagnosis. In the case of epidural or intrathecal analgesia, back pain or nerve root pain

may signify the presence of an epidural abscess or haematoma.

- 2.4.3 Protocols for the recognition and treatment of side effects (pharmacological or physiological) that may result from the use of analgesic drugs (local anaesthetic, opioids, adjuvant medications) should be available.

- 2.4.4 Protocols for the recognition and management of possible complications resulting from the use of indwelling catheters should be available. In the case of epidural or intrathecal analgesia, these complications may include epidural abscess, epidural haematoma and spinal cord or nerve root compression. In such cases, urgent assessment is essential. Should imaging be required, an MRI is preferable to a CT scan.

- 2.5 Patients must be reviewed at least daily by an anaesthetist and an anaesthetist must be available for consultation or management of complications at all times. The catheter insertion site should be inspected for signs of inflammation/infection and a review of neurologic function should be performed.

- 2.6 The catheter may be removed by a registered nurse, who has received the appropriate education, on the orders of an anaesthetist. Details of the removal of the catheter, the date, time, and state of the catheter and insertion site must be documented in the patient's record. Follow-up assessment is desirable. An appropriate protocol must be available that relates timing of the removal of a catheter (as well as catheter insertion) to the timing of administration of any anticoagulant medication.

- 2.7 Surgical and/or other medical staff caring for the patient must be aware of the analgesic technique used, its potential complications and any specific implications for the surgery performed or other management issues for the patient. The need for appropriate consultation with specialised pain management staff should be communicated to other medical staff.

3. Specific Principles for Epidural Analgesia in Obstetrics

- 3.1 Epidural analgesia has the potential to change many of the normal physiological processes of labour and delivery. From the time that epidural analgesia is instituted, it is essential that the mother is under the care of a medical practitioner with obstetric training who can assess the mother as necessary, and rapidly effect delivery of the baby by whatever technique is appropriate.

- 3.2 The practitioner establishing regional analgesia must establish that the mother has consented to the procedure after having been informed about advantages, disadvantages and alternatives. This should normally be part of ante-natal education.
- 3.3 From commencement to completion of epidural analgesia in labour, there must be appropriately skilled staff and equipment available to monitor and care for both mother and fetus, and to manage any complications arising from the epidural analgesia or labour.

4. Equipment and Staffing

Equipment and staffing of the area in which the patient is being managed should satisfy the requirements of the relevant Australian and New Zealand College of Anaesthetists Professional Documents, where appropriate:

- T1 *Recommendations on Minimum Facilities for Safe Anaesthesia Practice in Operating Suites*
- T2 *Recommendations on Minimum Facilities for Safe Anaesthesia Practice outside Operating Suites*
- PS2 *Statement on Credentialling in Anaesthesia*
- PS4 *Recommendations for the Post-Anaesthesia Recovery Room*
- PS8 *Recommendations on the Assistant for the Anaesthetist*
- PS9 *Guidelines on Conscious Sedation for Diagnostic, Interventional Medical and Surgical Procedures*
- PS10 *The Handover of Responsibility During an Anaesthetic*
- PS14 *Guidelines for the Conduct of Major Regional Analgesia in Obstetrics*
- PS18 *Recommendations on Monitoring During Anaesthesia*
- PS41 *Guidelines on Acute Pain Management*

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Australian and New Zealand College of Anaesthetists

ABN 82 055 042 852

Australasian College for Emergency Medicine

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Review PS48 (2003)

STATEMENT ON CLINICAL PRINCIPLES FOR PROCEDURAL SEDATION

1. Introduction

The purpose of this paper is to outline the basic clinical principles underlying the practice of procedural sedation.

The specific application of these principles is a matter for policy development and determination by appropriate professional organisations.

2. Patient Assessment and Preparation

All patients should be assessed before sedation for a procedure. Assessment should include:

- 2.1 Medical history, including details of events leading to the current problem, co-existing medical conditions, past medical history, including anaesthesia and surgery, medications, recreational drugs, allergies, and fasting status (seriously ill or injured patients should be assumed to have a full stomach).
- 2.2 Examination, including that relevant to the current problem, airway, cardiovascular and respiratory status, other systems identified by the history.
- 2.3 Relevant investigations.
- 2.4 Identification of risk factors (eg co-morbidities, allergies, ASA classification).
- 2.5 Obtaining of informed consent for sedation and the procedure.

3. Staffing

Sedation and performance of a procedure requires at least two appropriately qualified staff:

- 3.1 One to perform the procedure.
- 3.2 One to be solely responsible for administration of medications, monitoring and care of the patient.
- 3.3 A medical specialist or advanced medical trainee or other appropriately credentialled medical practitioner with specific experience in airway management and resuscitation must be either

directly involved in performance of the procedure or administration of the sedation.

- 3.4 If general anaesthesia is intended for the procedure, a medical practitioner trained in the use of anaesthetic agents and techniques must be present to care exclusively for the patient.

4. Facilities

The procedure must be performed in a suitable clinical area with facilities for monitoring, and advanced cardiorespiratory resuscitation.

There must be immediate and dedicated availability of equipment for oxygen administration and artificial ventilation, suction, and equipment and medications for cardiac resuscitation.

5. Monitoring

All patients undergoing intravenous sedation must be monitored continuously with pulse oximetry. There must be regular recording of pulse rate, oxygen saturation and blood pressure throughout the procedure. Other monitors such as ECG or capnometry may be required.

6. Medication

Doses of medications must be calculated, drawn up and labelled prior to the procedure.

Appropriate antagonists must be available.

Secure intravenous access is mandatory.

Oxygen must be given to every sedated patient.

7. Recovery

Close observation and monitoring by appropriately trained staff in a suitable clinical area with immediate availability of oxygen, suction, resuscitation drugs and equipment should continue until the patient returns to their pre-sedation state of consciousness and cardiorespiratory function.

8. Documentation

The clinical record should include the names of staff performing sedation and the procedure, with documentation of the history, examination, investigations, details of the medications and fluids administered (including time, dose, route) any resulting complications, as well as monitoring used, and data measured. Progress in the recovery phase should be similarly documented.

9. Discharge

The patient may leave the recovery area or be discharged when:

- 9.1 Vital signs and level of consciousness have returned to pre-sedation level.
- 9.2 An appropriate accompanying person and transport is available.
- 9.3 Appropriate further care has been arranged.

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PROFESSIONAL DOCUMENTS

P = Professional T = Technical EX = Examinations
PS = Professional Standards TE = Training and Educational

TE1	(2001)	Guidelines for Hospitals seeking College Approval of Posts for the First Four Years of Vocational Training in Anaesthesia <i>Bulletin June 2001, pg 92</i>
TE3	(1999)	Supervision of Clinical Experience for Trainees in Anaesthesia <i>Bulletin November 1999, pg 67</i>
TE4	(2002)	Policy on Duties of Regional Education Officers in Anaesthesia <i>Bulletin November 2002, pg 84</i>
TE5	(2002)	Policy for Supervisors of Training in Anaesthesia <i>Bulletin November 2002, pg 76</i>
TE6	(2000)	Guidelines on the Duties of an Anaesthetist <i>Bulletin July 2000, pg 86</i>
TE7	(1999)	Secretarial and Support Services to Departments of Anaesthesia <i>Bulletin November 1999, pg 69</i>
TE9	(1999)	Quality Assurance <i>Bulletin June 1999, pg 94</i>
TE11	(1999)	Formal Project Guidelines <i>Bulletin March 1999, pg 70</i>
TE13	(2001)	Guidelines for the Provisional Fellowship Year <i>Bulletin November 2001, pg 76</i>
TE14	(2001)	Policy for the In-Training Assessment of Trainees in Anaesthesia <i>Bulletin November 2001, pg 84</i>
TE17	(1999)	Advisors of Candidates for Anaesthesia Training <i>Bulletin November 1999, pg 66</i>
TE18	(2000)	Guidelines for Assisting Trainees with Difficulties <i>Bulletin March 2001, pg 76</i>
EX1	(2001)	Policy on Examination Candidates Suffering from Illness, Accident or Disability <i>Bulletin November 2001, pg 75</i>
T1	(2000)	Recommendations on Minimum Facilities for Safe Anaesthesia Practice in Operating Suites <i>Bulletin March 2001, pg 68</i>
T2	(2000)	Recommendations on Minimum Facilities for Safe Anaesthesia Practice outside Operating Suites <i>Bulletin March 2001, pg 72</i>
PS1	(2002)	Recommendations on Essential Training for Rural General Practitioners in Australia Proposing to Administer Anaesthesia <i>Bulletin November 2002, pg 78</i>
PS2	(2001)	Statement on Credentialling in Anaesthesia <i>Bulletin March 2002, pg 65</i>
PS3	(2003)	Guidelines for the Management of Major Regional Analgesia <i>Bulletin March 2003, pg 70</i>
PS4	(2000)	Recommendations for the Post-Anaesthesia Recovery Room <i>Bulletin November 2000, pg 72</i>
PS6	(2001)	Recommendations on the Recording of an Episode of Anaesthesia Care (the Anaesthesia Record) <i>Bulletin November 2001, pg 77</i>
PS7	(1998)	The Pre-Anaesthesia Consultation <i>Bulletin March 1998, pg 73</i>
PS8	(1998)	The Assistant for the Anaesthetist <i>Bulletin March 1998, pg 75</i>
PS9	(2001)	Guidelines on Conscious Sedation for Diagnostic, Interventional Medical and Surgical Procedures <i>Bulletin June 2001, pg 88</i>
PS10	(1999)	The Handover of Responsibility During an Anaesthetic <i>Bulletin November 1999, pg 62</i>
P11	(1991)	Management of Cardiopulmonary Bypass <i>Bulletin May 1991, pg 43</i>
PS12	(2001)	Statement on Smoking as Related to the Perioperative Period <i>Bulletin November 2001, pg 79</i>
PS14	(1998)	Guidelines for the Conduct of Major Regional Analgesia in Obstetrics <i>Bulletin November 1998, pg 81</i>
PS15	(2000)	Recommendations for the Perioperative Care of Patients Selected for Day Care Surgery <i>Bulletin November 2000, pg 75</i>
PS16	(2001)	Statement on the Standards of Practice of a Specialist Anaesthetist <i>Bulletin November 2001, pg 81</i>
PS18	(2000)	Recommendations on Monitoring During Anaesthesia <i>Bulletin November 2000, pg 78</i>
PS19	(2001)	Recommendations on Monitored Care by an Anaesthetist <i>Bulletin November 2001, pg 82</i>
PS20	(2001)	Recommendations for Responsibilities of the Anaesthetist in the Post-Operative Period <i>Bulletin November 2001, pg 83</i>
P21	(1996)	Sedation for Dental Procedures <i>Bulletin March 1997, pg 56</i>
P24	(1997)	Sedation for Endoscopy <i>Bulletin May 1997, pg 78</i>
PS26	(1999)	Guidelines on Providing Information about the Services of an Anaesthetist <i>Bulletin November 1999, pg 63</i>
P27	(1994)	Standards of Practice for Major Extracorporeal Perfusion <i>Bulletin November 1994, pg 46</i>
P28	(1995)	Policy on Infection Control in Anaesthesia <i>Bulletin March 1995, pg 38</i>
PS29	(2002)	Statement on Anaesthesia Care of Children in Healthcare Facilities without Dedicated Paediatric Facilities <i>Bulletin November 2002, pg 80</i>

- PS31 (1997) Protocol for Checking the Anaesthetic Machine *Bulletin November 1997, pg 84*
- PS36 (1997) Sedation for Regional Anaesthesia for Ophthalmic Surgery *Bulletin November 1997, pg 93*
- PS37 (1998) Regional Anaesthesia and Allied Health Practitioners *Bulletin March 1998, pg 79*
- PS38 (1999) Statement Relating to the Relief of Pain and Suffering and End of Life Decisions *Bulletin June 1999, pg 93*
- PS39 (2003) Minimum Standards for Intrahospital Transport of Critically Ill Patients *Bulletin March 2003, pg 67*
- PS40 (2000) Guidelines for the Relationship Between Fellows and the Healthcare Industry *Bulletin March 2000, pg 55*
- PS41 (2000) Guidelines on Acute Pain Management *Bulletin November 2000, pg 80*
- PS42 (2000) Recommendations for Staffing of Departments of Anaesthesia *Bulletin March 2001, pg 63*
- PS43 (2001) Statement on Fatigue and the Anaesthetist *Bulletin March 2002, pg 69*
- PS44 (2001) Guidelines to Fellows Acting on Appointments Committees for Senior Staff in Anaesthesia *Bulletin March 2002, pg 71*
- PS45 (2001) Statement on Patients' Rights to Pain Management *Bulletin March 2002, pg 72*
- PS46 (2002) Recommendations for Training and Practice of Diagnostic Perioperative Transoesophageal Echocardiography in Adults *Bulletin November 2002, pg 73*
- PS47 (2002) Guidelines for Hospitals Seeking College Approval of Posts for Vocational Training in Diving and Hyperbaric Medicine *Bulletin November 2002, pg 82*
- PS 48 (2003) Statement on Clinical Principles for Procedural Sedation *Bulletin March 2003, pg 73*