



RESONANCE

NEWSLETTER of the New Zealand Branch of the Royal Australian and New Zealand College of Radiologists

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CHAIRSPACE

Aspiring to Excellence

We in Radiology divide the whole history of medicine into 2 halves. 1895 was the watershed year for our specialty. Once Röntgen had exposed “her indoors” to his invisible rays and got a picture of her hand, everything changed for us. All of a sudden we had something to do, and plain films began backing up quickly.

Other seminal events in medicine came thick and fast in the 20th Century. Surgeons started washing their hands, antibiotics were invented, and then ultrasound, CT, MR, and PET took over the world. In the first decade of the 21st Century radiology is now clearly at the epicentre of the medical universe. All roads lead to Rome and we are the guys in togas. We answer all the hard questions like what is the diagnosis here? Does this patient need surgery? Is the heavy duty chemo and radiotherapy working? Is the patient cured?

Radiology has become the shining star that it is today by adopting and embracing new technologies, and constantly upskilling and honing our knowledge and procedural techniques. Subspecialisation has helped us to focus our efforts, concentrate our experience and become experts in various fields. We certainly didn't get where we are today by lowering the bar on postgraduate education, being inclusive and settling for “good enough” attitudes for our profession. There are societal trends to dumb everything down and aspire to mediocrity, but we should reject these trends.

“*Aspiring to Excellence*” was the title Sir John Tooke gave to the recent report (January 2008) on the 2007 debacle in British postgraduate medical training. Training budgets were being raided by cash-strapped health authorities. The new system of trainee selection following the “Modernising Medical Careers” ethos left huge numbers of British junior doctors without training jobs, and there was widespread disaffection with the whole process.

While our current system of registrar selection and training could certainly be improved upon, it has got us this far, no one else is doing it, and fellowship of the College stands as an international qualification



second to none. The impending roll-out of the new RANZCR curriculum will build on and improve our training. Establishment of a national training network in New Zealand will hopefully provide for increased trainee numbers and diversify their professional experience.

We currently manage to attract some of the best and brightest junior doctors into Radiology and our training posts are always over-subscribed by well qualified applicants. It is crucially important for the College, heads of departments, supervisors of training and all radiologists to be staunch advocates for the proper resourcing of training and education.

Clinicians with PACS monitors in their offices and their damp index fingers hoisted aloft can think that they are as good as any radiologist at image interpretation, but they aren't. Let's make sure our training and ongoing education keeps us well ahead of the pack.

Keep looking for good evidence and keep your finger dry.

Mark Leadbitter

CHRISTCHURCH *by Sean Skea*



Four months as chief of radiology and the momentum is increasing. I left the Hawke's Bay to look for a new challenge and that certainly has proven to be the case. Life here has been a rollercoaster ride and I have learnt much in a short space

of time. Senior management here are engaging clinical leadership in courses to understand the environment we operate in and to see how we can reduce waste in the delivery of healthcare.

The department faces many challenges not least of all the increasing and almost insatiable demand for imaging, against a background of limited capacity and budgetary constraints, but I guess that is true for many DHBs around New Zealand

We will very shortly be overrun by our business development unit looking to make the department lean under the mantle of "Improving the Patient

Journey through Radiology" aka IPJR. Words like 5S, lean thinking, Kaizen, value stream mapping, etc. have been heard in the corridors. This is about identifying the constraints in radiology that get in the way of providing a value added service to our patients. Against this backdrop the department will also be looking at how best to manage demand, and therein lies the challenge.

The department will shortly be choosing a preferred vendor to supply a second 64 channel MDCT and we hope to be operational by the end of July. My thanks go to our CT staff which currently manages to put anywhere up to 68 patients a day through the current GE VCT scanner.

Another major business case currently underway is to significantly improve our DSA service with a new flat panel unit and to upgrade the existing unit to a much higher spec. so that we have two rooms operating side by side. A second MRI is planned for 2009.

As I write our chest DR room is being installed and we look forward to seeing the benefits of this new technology.

My vision for this department as we go forward is to provide a timely value added service and I look forward to the day when I can say that we have no significant if any waitlists and where images are reported within minutes to a few hours of being produced.

MUSINGS FROM MIDDLEMORE *by Stuart Barnard*

When I arrived at Counties Manukau DHB (CMDHB) in July 2006 I was struck by the amount of pathology that I saw in everyday practice. This is not a department troubled by the 'worried well' or dominated by the diseases of ageing.

The work of the radiology department reflects the population that we serve. CMDHB is located in South Auckland; we have a rapidly growing population (460,000 in 2008) with a very diverse ethnic mix. Seventeen per cent of our population are Maori, 21% of Pacific Island origin and a large Asian population (16%). We have translators for more than 80 different languages. There are also a large number of patients in the lower deciles.

The hospital is a mixture of brand new and the very old. The department was completely refurbished in 2005 and now has a very good standard of environment and facilities.

Our major challenges are a common theme throughout New Zealand: staffing and keeping up to date with the latest radiology equipment.

Staffing is a constant issue – with 147 funded FTEs, including all the staff groups, there are always staff leaving and gaps to be filled. We have 9 registrars from the Auckland Scheme in the department, which keep us on our toes and hopefully prevent us from becoming too stale. Our team consists 24 consultant radiologists (about 18 FTE), but we are funded for more and continue to seek more consultants from New Zealand and

overseas with some success. We are all too aware of the challenge posed by our better-funded colleagues across the Tasman.

We have managed to re-introduce all of the clinico-radiological conferences that had suffered when staffing was tighter, and even managed to introduce some new ones. These are a highlight of the service and enhance the collegial relationships both within and outside the department. Regular weekly 'interesting cases' meetings and a monthly quality assurance conference remind us that there is always room for improvement ... (and also that the only way to avoid error is not to report any examinations).

On the equipment front the department has been film-less (apart from mammography) since 2000. A new RIS system will be installed later this year and we await the introduction of voice recognition with interest. An outside provider had performed all the MRI scans for the DHB for many years until our new Siemens 1.5T magnet was installed last year. This has improved inpatient access to the service and ensures experience in MRI for the radiologists. Some of our clinical colleagues have embraced the new availability with enthusiasm - it is hard to believe there are any patients in South Auckland who haven't had an MRCP. A new CT scanner will be installed in the next quarter and there are plans for a ninth ultrasound machine purchase.

Management is keen for us to improve community access for patients and bring down waiting times for in- and out-patients, whilst the politicians keep telling us that we can't have any more money. I'm sure that these issues are similar around New Zealand and will not be resolved overnight.

*"The prospect of a lot
Of dull MPs in close proximity,
All thinking for themselves is what
No man can face with equanimity.
W. S. Gilbert 1836-1911:
Iolanthe (1882)"*

IMRT PROGRAMME DEVELOPMENT IN NEW ZEALAND



The IMRT is a logical progression of the radiotherapy techniques, beyond the introduction of 3D conformal radiotherapy.

The advantage of delivering high doses in highly conformal fashion, while

sparing the normal tissues and organs at risk has been the radiotherapy dream for many years. The degree of conformality of an IMRT plan is difficult to achieve with 3D-conformal radiotherapy planning. It allows for dose escalation without causing undue toxicity.

The modern linear accelerators and planning systems have made the development of IMRT program in community based hospital possible. The Palmerston North IMRT programme started back in 2003 after one and a half year period of preparation. The commissioning of IMRT included several important steps: (i) small fields dosimetry

and output measurements; (ii) planning system calculation algorithms commissioning; (iii) MLC calibration and modelling; (iv) establishment of a robust treatment verification process.

The IMRT program development required the commitment from all the professional groups involved: radiation oncologists, dosimetrists, treatment radiographers and medical physicists. Although it was a resource intensive undertaking, there was a reasonably steep learning curve and the planning time for IMRT very soon became comparable and even shorter than the time needed for complicated 3D conformal planning.

IMRT plans are very strictly quality assured. Palmerston North developed an in-house built phantom and software for IMRT verification. At the present moment of time Palmerston North Hospital treats approximately 30 to 40 patients a year with inverse planned IMRT plans. The treatment slot is 15 minutes per fraction. Concurrent boost (dose

painting) is routinely used. The Palmerston North IMRT program was recently accredited via the MD Anderson Cancer Center accreditation process. It is one of the first IMRT programs in Australasia to undergo this type of international credentialing.

Due to resource restrictions the use of IMRT is mostly confined to head-and-neck cancer and the brain tumor groups. A recent audit of the patients with head and neck cancers, received "dose painting" primary radiotherapy showed local control rates at two years of 85%. The exciting new areas for IMRT would be chest and gynaecology cancers. IMRT should not be seen in isolation. It would be greatly enhanced by development of supplementary

*Nik Nedev
Palmerston North*

Letters to the Editor...

Dear Editor,

I read with interest Mark Leadbitter's Editorial on error in November's issue.

In my opinion, Dr Leadbitter concentrates too much on the traditional anxieties of radiologists with respect to error, i.e. mainly errors of perception. If one reviews the Health and Disability Commissioner's website, the areas where radiologists do find themselves in trouble are not in this traditional source of anxiety, but rather in organisational issues. These may be related to informed consent, and interventional radiologists in particular are vulnerable to criticism as we

often meet the patients for the first time just prior to the procedure. The Health and Disability Commissioner Act states quite clearly that consent must be taken in an atmosphere that is conducive to open and frank discussion. This precludes the biopsy room or the recovery room next to the interventional suite.

Other areas where radiologists appear on the Health and Disability website are related to the failure of radiologists to introduce registrars as doctors-in-training. This is deemed important as the patient has the right to refuse treatment from a doctor-in-training (this includes consultants that may be learning a new procedure).

Other areas where radiologists have found themselves in difficulty are related to the transmission of reports in a timely manner, unreported radiographs due to problems with PACS, and unverified reports.

In conclusion, although Dr Leadbitter's advice is good, in my opinion radiologists are more likely to find themselves in the spotlight in other areas of our practice and it is useful to reflect on these and not be too focused on errors of perception, which are usually easily defended.

*Professor Tim Buckenham
Clinical Professor of Radiology & Vascular Radiologist
Christchurch*



Obituary – CHALMERS ('CHUM') ALLEN 7-9-1902 TO 20-8-2007

When I came to New Plymouth in 1968 there were three specialists in the city with the name of Allen.

Chum and Peter were the Radiologists and Peter also ran the radiotherapy service. Brother Dennis was the sole Pathologist here. A redoubtable team. On my return here in 1974, the department had moved to the Westown site and had been re-equipped with state of the art Siemens and Philips equipment chosen by Chum. He was the Head of the Radiology service for the thirty years between 1955 and 1985 after which time he worked on intermittently as a locum. He promoted the new modalities as they became available and this included the addition of Ultrasound in the early 80's and CT in 1987. The

department had grown to about three times in size since its commissioning, and Chum played a pivotal role in this development, improvement and innovation.

Woven through this essentially fulltime hospital appointment was a commitment to private practice which was started in 1947 but continues today as Fulford Radiology. All of this made for a busy life for Chum before the arrival here in the 80s of two younger radiologists from the UK, with service commitments to a population of 120 thousand people.

Radiographer training was carried out under the banner of RMIT in Melbourne under Chum's supervision. This was a hands on course as was radiology nursing. Chum was one of the first radiologists in the country to carry out angiography

which he started here in the early 60s soon after its introduction from Sweden. The Angiography suite at Taranaki Base Hospital bears the name the 'Chalmers Allen Angiography Suite' in recognition of his early pioneering work.

Throughout his professional life Chum was involved in hospital administration. He was elected a fellow of the College of Radiologists soon after its formation.

He was a distinguished man, one of three members of a local family involved in specialist practice. He influenced many people in the course of his professional life and we are all greatly indebted to him.

*Rhys Harding
New Plymouth*

calendar

APRIL 2008

06 – 08: Radiology
Part II Writtens

13 – 18: ARRS

28 – 29: Radiology
Part I Writtens

MAY 2008

RANZCR 59TH ASM
Call for Abstracts close

RANZCR 59TH ASM
EarlyBird Reg begins

03 – 04: AMSIG

16: NZ Branch ASM
Call For Abstracts close

16: Radiation Oncology
Part I Writtens

19: Radiation Oncology
Part I Writtens

21 – 24: TROG

23: Applications close
Radiation Oncology Part II
July/Aug 2008

JUNE 2008

12 – 13 Radiology
Part II Vivas

13: NZ Branch ASM EarlyBird
Reg begins

JULY 2008

RANZCR 59TH ASM
EarlyBird Reg close

04: Applications close
Radiology examinations
Part I & II- 2nd series

18: Radiation Oncology
Part II Writtens

21: Radiation Oncology
Part II Writtens

SKYCITY Auckland Convention Centre
Friday 15 to Sunday 17 August 2008

Royal Australian and New Zealand
College of Radiologists
New Zealand Branch Annual Scientific Meeting

Organising Committee:
Chris McKee, Convenor
Phillip Clark
Trevor Chan
David Cranefield

Confirmed Keynote Speakers:
Clyde A Helms, MD
Professor of Radiology and Surgery
Director, Division of Musculoskeletal Radiology
Duke University School of Medicine
Durham, Northern Carolina, USA

Suresh Mukherji, MD
Professor and Chief of Neuroradiology and
Head & Neck Radiology
Professor of Radiology, Otolaryngology Head
Neck Surgery & Radiation Oncology
University of Michigan Health System,
Ann Arbor, USA

Robert A Nowelline, MD
Professor of Radiology, Harvard Medical School
Director of Emergency Radiology & Director of
Undergraduate Radiology Education
Massachusetts General Hospital, Boston, USA

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Abstract Submission Closes 16 May 2008
See website for details
www.ranzcr2008.co.nz

Call for Abstracts

Abstract Submissions will close on
Friday 16 May 2008.

Abstracts are invited from Fellows, Educational
Affiliates and Registrars for the following prizes:

RANZCR NZ Branch Education Trust Fund Proffered Paper Prize

The best Proffered Paper Prize for Radiodiagnosis
and Radiation Oncology*, offering financial
assistance to attend the 59th RANZCR Annual
Scientific Meeting to be held in Adelaide (16-18
October 2008), to a maximum level \$3,000. New
Zealand resident RANZCR Fellows and Educational
Affiliates are eligible to enter.

* Radiation Oncology will not be meeting in Auckland in 2008.

RANZCR NZ Branch Education Trust Fund Poster Prize

This is the best Poster Prize for Radiodiagnosis and
Radiation Oncology*.

The prize offers financial assistance to attend the
59th RANZCR Annual Scientific Meeting to be held
in Adelaide (16-18 October 2008) to the level of
\$1500. New Zealand resident RANZCR Fellows,
Educational Affiliates and Registrars are eligible
to enter.

* Radiation Oncology will not be meeting in Auckland in 2008.

OBEX Advancing Education Award - Best Radiology Registrar Presentation 2008

OBEX Medical Registrar prize has been established
for 14 years and is awarded to the best Registrar
Presentation. The prize of \$2500 is to assist with
attending the 59th RANZCR Annual Scientific
Meeting to be held in Adelaide (16-18 October
2008), where the winning New Zealand Paper will
be presented. New Zealand resident Radiology
Registrars are eligible to enter.

Submission Instructions & Conditions

- Abstract submission must be made on the official form and in the correct format.
- All presenters are required to register for the conference.
- Oral presentations will be 15 minutes in total for (12 minutes presentation with questions).
- Posters submitted should fit within a standard sized board of 900mm wide and 1200mm high.

Acknowledgement & Notification

- You will receive a return email to confirm receipt of your submitted abstract.
- Oral and poster presentations will be selected from the submitted abstracts.
- Applicants will be notified of acceptance by 30 May 2008.

Download your Abstract Submission from the website www.ranzcr2008.co.nz (MSWord format) and email to ranzcr@outshine.co.nz. If you have any questions, please contact the Conference Manager.

Articles

We welcome contributions to **FROM THE VIEWBOX**. We reserve the right to edit submissions.

Resonance will be published in March, July and November.

2008 Deadlines are:

23 June

3 November

Next issue

Tauranga
Wellington
Radiation Oncology

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Opinions expressed herein are those of the authors and do not necessarily reflect the view of the Royal Australian and New Zealand College of Radiologists (RANZCR).