From the Editor’s Desk

FOCUS ON METROPOLITAN HOSPITALS

Metropolitan hospitals are vital to our hospital system. For every tertiary referral hospital in our national capitals, there are at least two metropolitan hospitals. Despite their dominance, they remain the poor cousins of the hospital family, and this relative poverty drew senior clinicians and bureaucrats to a meeting in Sydney recently.*

The perennial buzz words — workforce shortages, quality and safety, risk management, training opportunities, effectiveness and efficiency — peppered the presentations. Emergent themes included the declining viability of clinical services, the effects of specialism, dissatisfaction among professionals, a chronic shortage of both senior and junior clinical staff, and the highly inadequate coverage of clinical services “after hours” (which amounts to more than 100 hours per week!).

The meeting threw up potential solutions: changing community expectations that every hospital should provide services for all clinical contingencies, and abandoning the “silo ethos” of hospitals in favour of clinical networks with precedence over individual institutions. Interestingly, one suggestion from the floor — that some hospitals cease to be acute general hospitals and become specialised elective centres — was greeted by sustained applause.

In short, the consensus for change was overwhelming, but expectations blunted.

The meeting also highlighted the emergence of a new species, “the locumist”. Medical workforce shortages combined with an absence of enforceable professional standards has seen commercial enterprises provide an expanding pool of low-skilled and itinerant locums. These individuals can earn up to $200 000 per year, to the chagrin of specialists, on whom they call for help, and vocational trainees doing the same shift. Meanwhile, the drain on the health budget runs into millions.

All in all, there was a refreshing impatience with the status quo and an enthusiasm for reform. Sadly, delay and indecision may see this expectant impatience subside into deadening indifference.


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Cover image: The canteen at Ourimbah Public School on the Central Coast of NSW serves only healthy foods and has diamond (highest level) accreditation with the NSW School Canteen Association. (See page 5)
Lesions caused by *Tunga penetrans*, the “chigoe” sandflea

A characteristic *Tunga penetrans* lesion (thick arrow), with pale-yellow papule and dark centre, and a less obvious lesion (thin arrow) with surrounding chronic skin changes and multiple, loosely attached eggs.

Incidental finding of *Dracunculus medinensis* in Australia

Tulsi Menon

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To the Editor: I report an infection with *Dracunculus medinensis* diagnosed incidentally on x-ray. The patient was a Sudanese immigrant, who had sustained a left knee joint effusion after falling. During management at Royal Perth Hospital, a calcified lesion with a serpentine appearance was seen on x-ray within soft tissues near the left knee joint. Its characteristic appearance, combined with the patient’s background, led to a diagnosis of *D. medinensis* (known as guinea-worm), a nematode parasite which causes dracunculiasis.

The patient’s knee effusion was managed conservatively and improved within a few weeks. The effusion was secondary to the fall and believed to be unrelated to the calcified *D. medinensis*.

Transmission of dracunculiasis is through consumption of contaminated water. The guinea-worm larvae mature and migrate towards the skin surface over 1 year (during which the patient remains asymptomatic), with over 90% of the worms appearing from the lower limbs. When in contact with water, the exposed guinea-worm releases larvae, and the lifecycle is completed when people ingest contaminated water. If the guinea-worms die before maturation, they usually calcify.

The Global Dracunculiasis Eradication Campaign was established in 1981 with the aim of eliminating dracunculiasis through water sanitation efforts. With no vaccine or treatment, prevention is the only method of eliminating dracunculiasis. Since the campaign was established, the number of people affected by dracunculiasis has decreased by 98%. Currently, Sudan alone accounts for 73% of cases.

Our patient migrated to Australia as a refugee from Sudan during the civil war. Her village in Sudan had only one source of water used for daily activities, including drinking. The patient knew many people with dracunculiasis, but did not know she had been infected.

When calcified guinea-worms are discovered during routine radiological examination, they usually do not need treatment. Many people are not aware they have been infected.
Muller reported 89% of patients with calcified guinea-worms were asymptomatic. 2

No known previous case of a radiologically diagnosed calcified guinea-worm has been reported in Australia. The consequences of war and famine, with a resultant increase in refugees and immigrants from affected nations, is likely to increase the number of incidental calcified guinea-worms found in non-endemic countries. This disease may have a significant impact if affected immigrants arrive during the incubation period (when asymptomatic) and the parasite emerges from the skin after immigration (rather than calcifying), similar to the patient described by Spring. 3 Thus, it is important for health personnel to be aware of dracunculiasis, including its radiological manifestations.

Acknowledgements: I thank Mr Alan Prosser, Dr Mike Ledger, Dr Vera Kinzel, and Dr Song for encouragement and assistance in preparing this letter.


LETTERS

Vitamin D and adult bone health in Australia and New Zealand: a position statement

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To the Editor: The Working Group of the Australian and New Zealand Bone and Mineral Society, Endocrine Society of Australia and Osteoporosis Australia are to be commended for their clear and succinct position statement on vitamin D and bone health. 1 This statement highlights an important public health issue which is under-recognised in this country. Of particular value is the box of recommendations on high-risk groups, testing and treatment.

However, I believe an important high-risk group has been omitted, a group which too often escapes the notice of the broader medical community. People with intellectual disability have been shown to be at particularly high risk of low vitamin D levels, reduced bone density and fractures. 2, 3 The reasons for this are multifactorial and include poor mobility, insufficient sun exposure, reduced muscle mass and strength, problems with dietary intake, and medications which interfere with vitamin D metabolism. 4, 5 There is also some evidence that people with intellectual disability are prone to premature ageing, together with the health problems associated with older age in the general population. 3 Some conditions which cause or are associated with intellectual disability are also linked with hypogonadism and reduced peak bone mass. 4

To add to all of this, several of the above risk factors, vitamin D deficiency itself, and the increased incidence of epilepsy in the population with intellectual disability, also result in an increased incidence of falls and trauma. 3 This unfortunate combination of poor bone health and increased risk of falls and trauma results in a markedly increased incidence of fracture when compared with age- and sex-matched controls from the general population. 2, 5

In conclusion, people with intellectual disability, particularly those with poor mobility or who are also being treated for epilepsy, should be added to the list of high risk groups. It is likely that the relatively simple steps set out in the position statement (screening for vitamin D deficiency and supplementation) will result in substantial health benefits for this small but particularly vulnerable group of people.


Alvin L K Chia,* Stephen Shumack,† Peter Foley‡

To the Editor: We read with alarm the extraordinary statements in the position statement on vitamin D and adult bone health published recently in the Journal. 1 The suggestion that “it is a fallacy that Australians receive adequate vitamin D from casual exposure to sunlight” is not true.

The suggested basis for this statement is an extraordinary extrapolation from a single study in which a small number of volunteers had whole body exposure on one occasion for 10–15 minutes to midday summer sun in Boston. It is not possible to extrapolate in such a way from this single demonstration, as the effect of shorter exposure times or repeated daily exposures were not examined. In fact, a study in Australia showed that the adult population (including those aged over 70 years) received sufficient sunlight while using sunscreen to ensure that no-one was found to have vitamin D deficiency during the study period. 2

While it is well accepted that ultraviolet B (UVB) radiation is essential for the formation of vitamin D3 in the skin, it is equally well established that continued exposure of vitamin D to UVB radiation results in its degradation. Hence, the importance of knowing the effect of lower sun exposures on vitamin D production.

It is intriguing that the authors of the position statement recommended a daily sun exposure dose that they calculate will produce 1000IU of vitamin D, but, if sun exposure is not possible, a vitamin D supplement of at least 400 IU per day.

The high prevalence of vitamin D deficiency among institutionalised older Australians is a tragedy, but this cannot be used
as the basis of advice for the general population who do receive daily sun exposure and appear to be the target of the statement. Nor can the mild vitamin D deficiency found in a single study in southern Victoria be used to recommend sun exposure in more northern Australian climes. Finally, while vitamin D supplementation has been shown to reduce the risk of fractures in the elderly, the proposed beneficial effect of deliberate sun exposure has not been demonstrated.

Recently, a joint position statement was approved by the Australian and New Zealand Bone and Mineral Society, Osteoporosis Australia, the Australasian College of Dermatologists and the Cancer Council Australia. This included the statement that “The majority of Australians generally have sufficient ultraviolet radiation exposure to enable adequate vitamin D production . . . to form and maintain healthy, strong bones”.3 This statement, endorsed only a few weeks ago, is in obvious conflict with the position statement from the same organisations that was published in this Journal. The latter puts the vast majority of Australians at further risk of skin cancers, which are already epidemic in our country.4


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IN REPLY: We agree with Vanlint that any individual who has limited mobility, or is housebound or institutionalised, is at risk of vitamin D deficiency, as highlighted in Box 3 of the position statement.1 Disability in general is likely to be a risk, with motor disability as well as intellectual disability liable to limit sun exposure. The problem may be further exaggerated by any increased risk of falls or convulsions.

Chia and colleagues have raised important issues. After a number of meetings, the Cancer Council of Australia, the Australasian College of Dermatologists and the Australian and New Zealand Bone and Mineral Society developed a considered consensus statement on vitamin D deficiency, risk of skin cancers and sunlight exposure, which was published at <http://www.cancer.org.au/documents/Risks_Benefits_Sun_Exposure_MAR05.pdf>. This document refers to the position statement published in this Journal in relation to sun-exposure guidelines for vitamin D.

Chia and colleagues’ objection to the abstract of this position statement appears ill-founded. If “a significant number of Australians are deficient in vitamin D”, then it follows logically that “it is a fallacy
that Australians receive adequate vitamin D from casual exposure to sunlight”, as sunlight is the main source of vitamin D in Australia. The significant number of Australians deficient in vitamin D are not the majority, as was clearly shown in the article, so this statement does not conflict with the complementary statement in the risks and benefits statement.

We stand by our original claim that a number of groups in the Australian community have a high prevalence of vitamin D deficiency, including elderly men with hip fracture (63%), Muslim women (68%), elderly ambulant men with prostate cancer (34%), “healthy” elderly men living in Southern Sydney (16%), healthy community-dwelling, ambulatory women in Geelong (20% in the age group 20–29 years, increasing to 53% in older age groups), men and women (some with psychiatric disorders) in south-east Queensland (23%), and even pregnant women in south-eastern Australia (7%) (references are available from the authors on request).

As noted in the position statement, and by Chia and colleagues, continued exposure to ultraviolet (UV) radiation may lead to degradation of pre-vitamin D, so that short exposures are likely to be more efficient. This degradation is marked only at relatively high UV doses. Studies that used lower UV doses produced indirect UV equivalence data similar to those quoted in the position statement. As the relationship between UV exposure and vitamin D dosage varies from person to person, and as sun exposure is also likely to be variable and on most days, rather than every day, the recommendation that vitamin D supplementation be at least 400 IU/day in people likely to be at risk of inadequate skin-derived vitamin D is entirely appropriate.

We strongly agree with Chia and colleagues about the need to avoid sun damage while still obtaining the small amount of sun exposure needed to make adequate vitamin D, which is why the position statement advocates short exposures, easily achieved by casual exposure, and reiterates other Sun-Safe messages, such as avoidance of exposure in peak UV periods and the use of sunscreens where appropriate.

Outcome of overseas commercial kidney transplantation: an Australian perspective

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To the Editor: A recent editorial by Matthew et al1 and an article by Kennedy et al2 tackle the issue of commercial kidney transplantation.

In their editorial, Mathew and colleagues conclude that if the nationwide Australian deceased donor organ donation rate approached South Australian levels, dialysis patients would not travel overseas to purchase renal allografts. I believe that this statement oversimplifies the situation with respect to organ trafficking and the motives behind patients’ acceptance of this option.

Organ trafficking is illegal under all state and territory laws within Australia and hence cannot occur. In a number of other countries around the world this is not the case. Although laws have been introduced in India, this has not necessarily led to cessation of trafficking in kidneys. Compounding this, the option of purchasing an organ is becoming more readily accessible by means of an increasing number of Internet sites.

What motivates patients to go through with purchasing an organ overseas is not explored either in the editorial by Mathew et al3 or the article by Kennedy et al. Kennedy et al do not state whether any of the patients who travelled overseas for a kidney had been deemed not fit to be on the renal transplant waiting list in New South Wales. They also do not give the waiting time on dialysis for each patient before he or she decided to travel overseas. What is clear is that only patients who can afford to pay the US$70 000 or more currently quoted for a renal allograft will be the ones who end up travelling overseas.

It would be nice to think that, with an increased organ donor rate in Australia, patients will no longer travel overseas to purchase organs. However, the ready availability of the commodity in not-too-distant countries and the increasing ease of access to this organ trade, combined with sufficient cash, will mean that there is no major barrier to some individuals.


IN REPLY: We agree that the motives for organ trafficking are complex. The reasons that people choose to travel overseas to obtain an organ was not addressed in our article on this occasion, but some possible reasons may be self evident given the long waiting time, especially in New South Wales. Our aim was to alert our colleagues to the increased risks associated with overseas commercial transplant procedures so that they could ensure that their patients were fully informed when making a decision.

Most of our patients were on the waiting list, and the time on dialysis was detailed in Box 2 in our article. However, two were not on the waiting list — one had a pre-emptive transplant and another was not on the list because of age-related medical problems.

The shortage of kidneys for transplantation in Australia

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TO THE EDITOR: We are writing in response to the pejorative, unhelpful and somewhat misleading editorial “The shortage of kidneys for transplantation in Australia”.1

There are many possible reasons for lower organ donation rates in Australia. Several Australian initiatives have led the way in reducing the incidence of severe, traumatic brain injuries. These include the compulsory wearing of seat belts and helmets, random breath testing, and a zero blood alcohol limit for inexperienced drivers. Intensive care medicine is better structured and organised in Australia and New Zealand than in most of the countries cited by Mathew et al, with higher organ donation rates. Intensive care outcomes in Australia are world-leading. So the donor rate may be lower because patient outcomes are better. A comprehensive chart audit of donor potential in New South Wales carried out under the supervision of the Organ Donation Network NSW/ACT, identified very few missed donors (T Wills, Manager, Organ Donation Network NSW/ACT, personal communication), and a Victorian audit has suggested that the donor pool may be much lower in Australia than previously estimated.2

Similarly, organ donation rates will appropriately vary considerably among hospitals. To improve outcomes, critically ill patients are transported to centres with specific experience and expertise, resulting in a preponderance of potential donors in hospitals with trauma and neurosurgical services compared with hospitals lacking these. The intensive care community supports these life-saving initiatives, notwithstanding the effect they may have on organ donation potential.

In fact, the principal “barrier” to organ donation in Australia appears to be the consent rate. From 2000 to 2004, 44% of families declined organ donation when faced with an actual rather than a hypothetical request.3

The intensive care community represents the interests of critically ill patients and their families. We will continue our best endeavours to improve both the survival and quality of life of patients suffering devastating brain injuries (our performance standard). When all brain function ceases, despite our best efforts, we will continue to facilitate organ donation, in discussion with the family, and in consideration of the patient’s known or projected wish. The intensive care community has led the way in developing organ donation-related practice guidelines4 and in related education. Australian Donor Awareness Program — Training (ADAPT) workshops are now a compulsory component of Fellowship of the Joint Faculty of Intensive Care Medicine training. The editorial implication of poor performance and lack of commitment is inaccurate and offensive.


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IN REPLY: We regret that Raper et al have misinterpreted our editorial on the shortage of donor kidneys in Australia.1 We are particularly concerned and indeed mystified by their last statement, where they state that we implied that “poor performance and . . . lack of commitment” were to blame. This was in no manner our message. Rather, we sought to emphasise that all possibilities to optimise local donation rates should be explored, so desperate patients seeking grafts from potentially dangerous overseas sources need not expose themselves to serious potential morbidity and mortality.

We consider that our intensive care colleagues perform superbly under the most difficult of circumstances when managing potential organ donation. We understand they are often unsupported with managing potential donations while they must at the same time deal with the grieving family, and the immediate demands of treating other seriously ill patients. We simply suggest that problems within the system (for example, differences between states in the number of intensive care beds per head of population or in the provision of specifically funded donor coordinators) that might hinder increasing organ donation should be carefully examined.

We believe it is unhelpful to suggest that the Australian experience should simply remain unexplained. In the article by Opdam and Silvester (cited by Raper et al), of 112 potential donors, 46 were considered medically suitable unpublished realised potential donors, and their estimated maximal potential donor rate was 30 per million,2 remarkably similar to the rates seen in Spain (the country with the highest organ donor procurement rate) and South Australia. We agree with the conclusions of Opdam et al that “an increase in the organ donation rate may be possible through increasing consent and the identification and support of potential donors”. As they also state, this would require substantial changes in clinical practice, with resource and ethical complications.

We did not mean to offend our intensivist colleagues. We merely suggest that we all need to assess the systems in which donation occurs and attempt to improve donation rates, for the sake of the many desperate people awaiting organ transplants in this country.


LETTERS

Detention for tuberculosis: public health and the law

A Medical Registrar and a Respiratory Physician
A New South Wales Teaching Hospital
Names withheld to protect patient privacy

TO THE EDITOR: The article by Senanayake and Ferson1 on detention for tuberculosis included two case histories. In the case of “Patient 2”, we believe the details published were misleading and unnecessarily disclosed potentially identifying information. This case was presented in sufficient detail to allow identification of “Patient 2” by including date of admission, personal details, city of admission and details regarding his past history of alcohol addiction and attempts to self-discharge. All this information was not necessary and did not take into account all the relevant medical complicating factors.

We were surprised that, as the primary treating team involved in this patient’s care over the inpatient stay of 3 months and the following 6-month outpatient follow-up, we were not informed of the authors’ plans for publication, nor requested to comment on the facts of the report. We were also surprised to read details of the article in The Sydney Morning Herald on the day of the article’s publication in the Journal.2


LETTERS
An individual's right to privacy is a fundamental human right. It is unfortunate that the careful consideration that had been given to his detention was not extended to publishing his case details. As Senanayake and Ferson point out, "Patient 2" recognised that his human rights were being "infringed" because he was being held in a "jail cell", which was a temporarily modified isolation room in a public hospital under 24-hour guard.

In law, information provided to a medical practitioner by a patient becomes subject to a statutory duty to protect the patient's privacy and a common-law duty of confidence is owed by the treating medical practitioner to the patient. The NHMRC Guidelines approved under Section 95A of the Privacy Act 1998 indicate that, when a patient history is published, an important principle is that a patient may not be identified or held up to ridicule. Furthermore, public access to medical journals on the Internet has allowed increased availability of such reports to the general public and increases the chance of family members and others identifying individuals.

The principle of protecting patient privacy has previously been respected by the Journal. An article published in 1994 reported a 1979 outbreak of tuberculosis in medical students who attended an autopsy of an immunosuppressed patient with unsuspected active tuberculosis. A report of the incident was not published contemporaneously, mainly to protect the privacy of the students involved.

As the report by Senanayake and Ferson suggests, our patient was socially disadvantaged, and several aspects of his behaviour were probably attributable to a Jarisch–Herxheimer reaction in conjunction with acute alcohol withdrawal. Although we recognise the need to serve the public interest in health matters, we suggest that, when a patient history is published, public interest prevails.

The article in question was not a case report. Case details were given to exemplify the circumstances that might lead to detention of a patient for public health reasons in New South Wales, and dates and some details were retained to illustrate the temporal flow of the story. We agree that this may have made the patient identifiable, if not to the general public, to himself or his family. We regret this editorial lapse, and have reordered the patient details in the electronic version of the article.

Although chastened by our anonymous colleagues' observations, we are somewhat puzzled as to why, given their concern about their patient's privacy, they are determined to draw further attention to the exposing details. We assume that, in this case (as in the cases of detaining patients for treatment of tuberculosis), public interest prevails.

We also agree that case reports of detailed clinical histories require the input of the primary treating team, but the question of authorship should be determined by the involved parties, not the Journal. Be that as it may, as the article was a public health report (and thus not meant to be a detailed clinical exposition), we do not believe that the input of the treating team was required.

2 Locking up TB cases defended. The Sydney Morning Herald 2004; 7 Jun: 5.

IN REPLY: We concur with the principle that patient privacy should be protected in case reports. As recommended by the International Committee of Medical Journal Editors, measures in place at the Journal include asking authors to obtain patient permission for publication where possible, and directing authors to remove potentially identifying patient information.

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The article in question was not a case report. Case details were given to exemplify the circumstances that might lead to detention of a patient for public health reasons in New South Wales, and dates and some details were retained to illustrate the temporal flow of the story. We agree that this may have made the patient identifiable, if not to the general public, to himself or his family. We regret this editorial lapse, and have reordered the patient details in the electronic version of the article.

Upon reflection, we now consider that the input of the treating team was required.