
EDITOR'S CHOICE

CME: Immunology

Immunology underlies most of the biological and clinical disciplines in medicine. This includes autoimmune diseases, infectious diseases and HIV, primary immunodeficiency, cancer and transplantation medicine. Indeed, the formalised use of immunology knowledge, laboratory techniques and targeted immunotherapies in routine clinical practice is now commonplace in much of the world. It is the most rapidly advancing field, and generalists need to keep up with advances in knowledge that impact on patient management. This is the impetus behind this month's CME, entitled 'Updates in immunology and allergy'. The medical community, both clinical and pathology disciplines, can no longer afford to see immunology as a 'black box' discipline irrelevant to day-to-day patient management or only applicable to the uncommon case of immunodeficiency or autoimmune disease. For South African (SA) doctors this means considering immunology beyond HIV medicine. Is it time for immunology in SA, amid competing public health needs, to be established as a distinct specialty or sub-specialty? This issue of CME provides an overview and an update on clinical immunology that will be indispensable to all practitioners.

'... may we live in a world without lawyers and court cases' (Confucius)

A year ago, I wrote an editorial^[1] lamenting the current SA penchant for suing health practitioners, sometimes clearly justified and warranted, but

often as a means to easy enrichment. I predicted that patients would be the losers.^[2] This issue of *SAMJ* carries much that confirms this sentiment.

Howarth *et al.*^[3] ask whether the public is unknowingly sleepwalking into a dystopian future. In the face of escalating costs of liability cover for specialists offering obstetric and neonatal care, spinal surgery and neurosurgery, they predict fewer doctors in these high-risk fields, with those remaining practising defensive medicine; an absence or severe curtailment of private specialist obstetric care; paediatricians and ophthalmologists reluctant to manage neonates; and fewer neurosurgeons in private practice, all restricted to the larger urban areas. Patients would have to be treated in already busy state facilities and would have to compete for resources. Any medicolegal liabilities would move across to the state sector hospitals and staff.

As Howarth *et al.* emphatically state, the medical profession cannot be expected to resolve the situation, as there is no medical answer. Rather, private patients, private providers, public patients, public providers, politicians and policy pundits all have a vested interest in resolving the problem – the issue has to enter the public debate.

Smith *et al.*^[4] point out that the annual premium for neurosurgeons in 2013 was R250 900, second only to that of obstetricians (R254 230), this rise having paralleled the increase in the number and amount of awards in malpractice litigation. (SA's highest-ever medical damages settlement of R25 million was awarded in June 2013, to a patient who had undergone neurosurgery). Neurosurgeons are indicating that they would not have chosen the specialty had they envisaged the current

medical liability situation. A third of their number have discontinued performing high-risk procedures because of the associated liability risk.

Walters^[5] suggests mediation as an alternative to litigation in medical malpractice, and states the obvious – that healthcare would be much better off if the money spent on the legal process were rather channelled into the healthcare system itself. This realisation has led to pursuit of alternative dispute resolution through arbitration or mediation. Walters believes that mediation is perhaps the most effective, since the majority of complaints against healthcare workers or institutions arise out of miscommunication. Such issues are ideal for the mediation process, involving the two parties, complainant and respondent, communicating through a facilitator. The complainant or aggrieved party defines and addresses his or her complaint to the respondent; the respondent then has the opportunity to explain the events that led to the complaint or grievance. A trained mediator guides both parties to a point of mutual agreement or acceptance.

Looking at the implications of *Venter v Roche Products (Pty) Limited and Others* for research ethics committees, Strode and Singh^[6] address what type of compensation research participants would be entitled to in a clinical trial when they have signed an informed consent document excluding certain forms of compensation. In this recent case, the court considered whether the plaintiff was entitled to claim for non-medical costs (pain and suffering, loss of income and general damages). His application for damages was dismissed because he had voluntarily agreed to the limited compensation as set out in the informed consent form, which had been approved by both the local research ethics committees and the Medicines Control Council.

The article warns that research ethics committees have the obligation both to ensure

that compensation clauses in informed-consent documents are carefully reviewed and that these are made clear to potential research participants.

Asking ‘Who will guard the guards?’, Parrish and Blockman^[7] aim to raise awareness of conflict of interest (COI) issues, including some tactics used by the pharmaceutical industry to influence thought leaders. COI exists when professional judgement in a primary interest is unduly influenced by a secondary interest and fosters a conflict in loyalties that translates into a biased decision, with the potential for harm. A good practical example is that, in the wake of reports regarding the risk of myocardial infarction in diabetics treated with rosiglitazone, authors who had favourable views on the safety of rosiglitazone were three times more likely to have a financial conflict of interest with a pharmaceutical company than were authors who had unfavourable views.^[8]

The Ebola epidemic rages on ...

As the Ebola epidemic rages,^[9,10] clinicians should ask every febrile patient: ‘Which African country(ies) have you recently visited?’ We are also reminded that the occupational risk of infection by blood-borne viruses (BBVs) in healthcare practitioners (HCPs) and students is significant, especially in the developing world.^[11] Three viral pathogens are known to pose the most serious risk: HIV, hepatitis B virus (HBV) and hepatitis C virus (HCV). The route of transmission can be percutaneous or mucosal, and is related to the work environment and practices of HCPs. Not only are HCPs at risk of acquiring these infections, but they also pose a risk to patients once infected. Rossouw *et al.*^[11] offer these recommendations: all HCPs and all healthcare students should know their infection and immune status (as appropriate) for all three major BBVs, and all who are not infected with HBV should be vaccinated and have their immune status confirmed prior to initiation of training.

Appropriateness of CT and MRI scans

Computed tomography (CT) and magnetic resonance imaging (MRI) are now an essential part of modern healthcare, enabling the practitioner to make non-invasive diagnoses. Imaging is one of the fastest-growing services in medicine, amounting to \$100 000 billion annually in the USA. The clinical information obtained, and their increased accessibility, has made these modalities attractive to both patients and referring physicians. However, marked increases in imaging utilisation are now straining healthcare expenditure and threatening health system sustainability. Becker *et al.*^[12] question the appropriateness of CT and MRI scans in the Eden and Central Karoo districts of the Western Cape. The increased utilisation of diagnostic imaging (see Fig. 2 of the article, reproduced below) has brought with it significant economic risks, plus medical risks through increased radiation exposure, with its accompanying carcinogenic potential, and the unforeseen gadolinium-related nephrogenic systemic fibrosis, over and above the well-known mild allergies and anaphylactoid responses.

The recommendation is that consultants be required to grant permission for CT or MRI, as at George Hospital, but with awareness of the American College of Radiologists Appropriateness Criteria and the Royal College of Radiology Guidelines.

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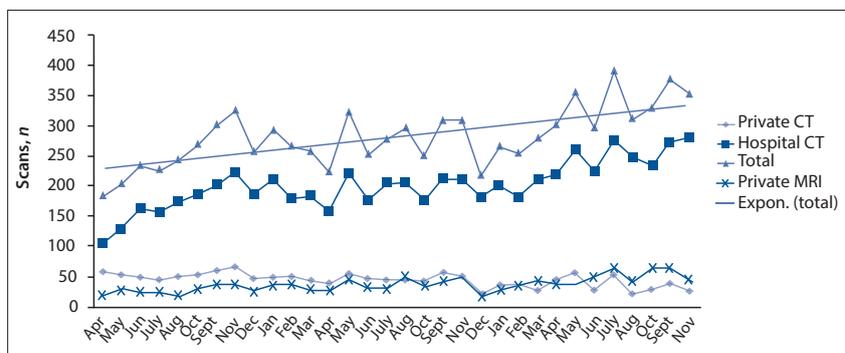


Fig. 2. CT and MRI scans done in the Eden and Central Karoo districts of the Western Cape Province, SA, from April 2011 to November 2013. (CT = computed tomography; MRI = magnetic resonance imaging; SA = South Africa.)