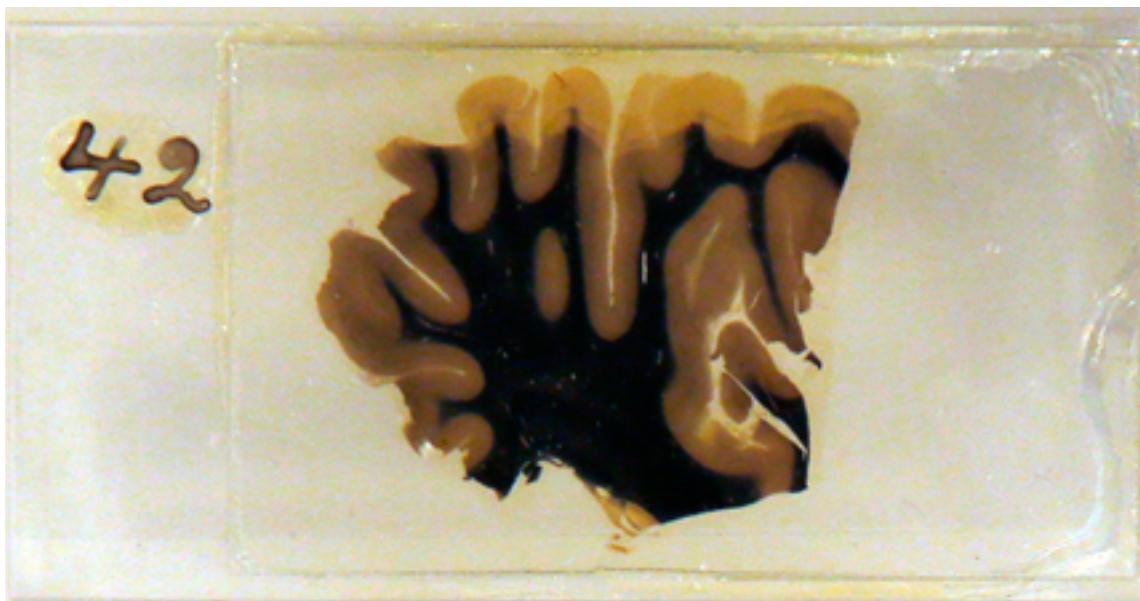




Reuters

A specimen of Nobel physicist Albert Einstein's brain is one of many notable brains on display at an exhibition in London. The exhibition, at the Wellcome Collection, includes over 150 artefacts such as real brains, artworks and photographs.

From the Australian Commission on Safety and Quality in Health Care

Antimicrobial stewardship — preserving the miracle

Antimicrobial resistance is regarded globally as a major threat to public health and patient safety. Patients with infections caused by antimicrobial-resistant bacteria experience delayed recovery and treatment failure, and are twice as likely to die as patients with infections caused by non-resistant organisms.

Improving patient safety by reducing inappropriate antimicrobial prescribing through antimicrobial stewardship (AMS) is a major objective of the Australian Commission on Safety and Quality in Health Care (ACSQHC). AMS is a systematic approach to optimising antimicrobial use. Successful AMS programs comprise a range of strategies and the structure and governance to support their implementation. However, only 25% of Australian hospitals have an AMS program.

Overall accountability for antimicrobial control lies with the hospital administration, whose role is to ensure AMS programs are developed and implemented, and outcomes are evaluated. Support from

hospital management should include:

- providing dedicated resources for stewardship activities, education, and measuring and monitoring antimicrobial use
- establishing a multidisciplinary AMS team
- ensuring that AMS resides within the hospital's quality improvement and patient safety governance structure.

A hospital AMS program needs to conduct basic activities for effective control of antimicrobial usage. These include:

- implementing clinical guidelines that take local microbiology and antimicrobial susceptibility patterns into account
- establishing formulary restriction and approval systems that include restricting broad-spectrum and later-generation antimicrobials to patients for whom their use is clinically justified
- reviewing antimicrobial prescribing, with intervention and provision of direct feedback to the prescriber
- ensuring the clinical microbiology

laboratory uses selective reporting of susceptibility testing results that is consistent with hospital antimicrobial treatment guidelines.

Local conditions will always influence the exact structure and activities of an AMS program. An AMS strategy should interact with local stakeholders by:

- educating prescribers, pharmacists and nurses about good antimicrobial prescribing practice and antimicrobial resistance
- using point-of-care interventions, including streamlining or de-escalation of therapy, dose optimisation or parenteral-to-oral conversion
- using information technology with clinical decision-support or online approval systems
- annually publishing facility-specific antimicrobial susceptibility data.

More information on the reasons and requirements for AMS programs and their implementation in hospitals can be found on the ACSQHC website at <http://www.health.gov.au/internet/safety/publishing.nsf/Content/Antimicrobial-Stewardship>.

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News

Ophthalmology shortage “dire”

There is a significant shortage of ophthalmologists in developing countries, according to a survey of ophthalmic societies in 193 countries conducted by the International Council of Ophthalmology. The survey reported a total of 204 909 ophthalmologists, one-third of whom were found in three countries: the United States, China and Russia. The number of ophthalmologists per million people varied considerably worldwide. On average, sub-Saharan African countries had the lowest number of ophthalmologists per million people (2.7), while former socialist countries had the highest, with 83.8 ophthalmologists per million

— a 30-fold difference. In 23 countries there was less than one ophthalmologist per million people.

In addition, in developed countries, the general population aged over 60 years was found to be growing at twice the rate of the profession. “The data delineate a dire situation”, the researchers wrote. “To meet this widening gap between need and supply, it is necessary to aggressively train eye care teams now to alleviate the current and anticipated deficit of ophthalmologists worldwide.”

Br J Ophthalmol 2012; doi:10.1136/bjophthalmol-2011-301378.



From the MJA archives

MJA 1916; February 5 (edited extract)

Experiences at Gallipoli

Everyone was on deck, and as the grey of the coming dawn became less dense, we turned in towards the Gallipoli Peninsula and slowly crept in towards the land. At 5.30 am we could see the cliffs and recognise their steepness and the difficulties. Our men could be seen climbing up wherever there was foothold and disappearing over the first ridge. At this time a pinnacle came alongside with a man shot through the chest, who died in five minutes after getting him on board, and another who was shot through the arm. A little later another boat brought a dead private of the 12th Battalion and seven wounded. These had never landed at all.

We did not get a tow ashore until just after 10 am and this journey, in crowded boat, towards the beach, was one of the most uncomfortable I have ever undertaken.

There were wounded everywhere. We were shown a spot for our dressing station, about 20 feet wide and from the cliff down to within six or 10 feet of the water's edge. There were five officers and 60 men.

During the first four days 3300 wounded passed through our hands. We gave up recording them, as our only book was filled on the first day, and simply counted them.

During this time all urgent operations were done, including necessary amputations, tying of arteries, several belly cases, depressed



compound fractures of skull, bladder cases and big, compound fractures of the thigh. All these necessitated anaesthetics, which were administered in nearly every instance by non-commissioned officers or by privates.

We could not get the wounded off the beach until night. They lay during the day all along the beach for several hundred yards, in what shelter we could devise, much of it inadequate. Many were hit by shrapnel while lying there and had to be re-dressed.

I really think that, owing to the organisation and the efficient and skilful work done by the non-commissioned officers and men of the 1st Australian Casualty Clearing Station, these huge numbers of casualties were handled in such an orderly and quick manner that the authorities themselves do not realise how excellent was the work done. I could talk for hours of the dash, heroism and amusing characteristics of the Australian troops, both in action, in trenches, and when wounded.

*By John Corbin, major,
First Australian Clearing Hospital*

Autoimmune epilepsy

A growing body of data support an autoimmune basis in patients with seizures that are not controlled by antiepileptic drugs. A new US study looked at response to immunotherapy among 32 patients whose main presenting symptom was recurrent, uncontrolled seizures, with a suspected autoimmune aetiology. Following immunotherapy treatment, 22 of 27 patients (81%) reported improvement after a median interval of 17 months, and 18 were seizure free. An editorial said the research was a reminder that we needed to “broaden our concept of symptomatic chronic epilepsy from the structural realm into more dynamic processes”. The editorial said although the true scope of autoimmune epilepsy was not known, it was probably underdiagnosed. “We need an increased appreciation of the potential role of autoantibodies in refractory epilepsy so we are not overlooking treatable etiologies”, it concluded.

Arch Neurol 2012; 26 March (online).

Polio's vexing vaccine

Polio eradication requires a change in the composition of the current oral vaccine, according to a report in the *Scientific American*. One component of the oral trivalent vaccine — type 2 poliovirus — now causes more cases of polio than it prevents. The type 2 poliovirus is thought to no longer exist in nature, yet because the oral vaccine includes “live” virus it can trigger polio in rare cases. Developed countries such as Australia use a more expensive, injected vaccine comprised of inactivated viruses. The World Health Assembly is expected to approve a plan in May that would remove the type 2 component from the oral vaccine.

Scientific American 2012; April.

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