From the Editor

Modernising Medical Careers and the Medical Training Application Service

As we go to press, the Department of Health (DH) has announced an urgent review of the process. We, among others, have for sometime urged the DH to test the new system in pilot studies or introduce the changes more slowly.

In an editorial published in June 2006[1] which reflected the College view at that time, we wrote, 'All these changes are due for implementation in August 2007.... These changes need a much longer transitional phase for effective implementation – they are far too complex to introduce in one phase'.

We hope that the urgent review will retrieve some common sense from the current chaos and reassure 'the new generation of young doctors whom we need to foster, encourage and support if they are to be the competent, positive, happy workforce that we need for the future to ensure high standards of patient care'.

Reference

1 Modernising Medical Careers. *Clin Med* 2006;6:229–30.

Where are you from?

It was one of those rare, blue-skied autumn days with a clear fresh north wind. The constructive and lively International Adviser's meeting had paused for lunch upstairs in the Osler Room. The staircase was bathed by a golden glow reflected from the brilliant sunshine in the College garden: a happy optimistic day. I joined a delegate walking up on his own. 'Where are you from?' I asked. 'Baghdad,' he replied and the dark heavy clouds descended as his story unfolded over lunch.

Under Saddam Hussein's regime, medicine was largely separated from politics. Indeed, medical care had improved. The medical undergraduate programme was effective and attracted high quality students. The acute medical care was well managed and the organisation and delivery of medical subspecialties well developed.

After the 2003 invasion of Baghdad the hopes for continued improvement were dashed and sadly lawlessness took over. Doctors and consultants in particular were prone to kidnap for ransom because their pattern of work and whereabouts could be readily identified. Even if the ransom was paid, the victim, far from being released, was often shot to eradicate any evidence which might identify their captors.

Iraq had been invaded to restore democracy and justice. Despite 'secure transport' it became impossible for consultants to visit hospitals and they were limited to providing medical advice by mobile phone. My dining companion's hospital was sited in a secure compound which was largely run by the junior doctors. Doctors could rarely leave this compound. Soon it was only possible to provide basic care. Many doctors were forced to flee the country although there were few alternative employment prospects. Others, like my companion, moved to the relative safety of the north of Iraq.

What became of his family? One son was still pursuing his medical undergraduate training, but was confined to the same secure compound along with his sister who worked in the pharmacy department. His other two sons had moved to London to pursue their postgraduate medical education. The elder had married a UK resident and thus was able to continue his medical training. The other had passed the Professional and Linguistic Assessments Board test and MRCP Part 1, both with high marks. Along with other international medical graduates, he had made numerous unsuccessful applications for training posts and had become depressed by repeated rejection.

Indeed in April 2006 the DH announced the sudden abolition of permit-free training and introduced a new system for all international medical graduates. From this time onwards, UK employers had to show that there was no suitable UK or European Union applicant before an international medical graduate could be considered for an appointment. I was only able to provide a few crumbs of comfort for our colleague. The College had lobbied hard for the introduction of an international sponsorship scheme in order to help such individuals. He was able to obtain the most recent information from the International Office together with the relevant application forms for his son.

It will be a long time before the sunny optimism of that morning is reflected in medicine and medical care in Baghdad and perhaps even longer before Britain can again hold its head high on the

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international medical stage. International medical graduates might then once again obtain their postgraduate training in the UK and take home glowing reports of the support and training that they have received.

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FURTHER INFORMATION

International Office, Royal College of Physicians. Information for international doctors.

www.rcplondon.ac.uk/International/int_doctors.htm

Electrical faults and the hydrogen hypercycle

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Epilepsy and other episodic events, whether cardiac events, migraines or moods, were once considered to be sacred diseases reflecting the belief that they warn of an impending energy crisis, comparable to electric lightning storms in the macrocosm. William Harvey linked the need to guarantee the energy supply to fire our metabolism through the newly found circulation with energy cycles of hydrogen oxide found in nature originating in the sun.[1]

High-energy acidic diets, whether ketogenic or modified Atkins, ease highly drug-resistant convulsions while a poor diet and alcohol exacerbate them as does extra consumption brought on by stress; even photic stimulation will alter proton use in the retina with secondary effects for the brain. Fits cause an acidosis in part from the muscular contractions and heat production and may relate to their spontaneous termination. Hyperventilation will do the opposite. The distinction between 'real' seizures, other organic clinical pictures and those driven solely by emotional factors is difficult. In the majority of difficult cases, different states overlap.

Anticonvulsants stabilise ion channels while links with the multi-drug transporter systems may relate to their physiological roles in adenosine triphosphate and nucleotide transport that carry hydrogen. The known mutations linked with epilepsy and many other conditions make channels rendered unidirectional transistors unresponsive to homeostatic events. This affects hydrogen bonding and therefore tertiary structures that are so vital to functions from memory in DNA to memory in the brain. Electrical stimulation using vagal or intracerebral electrodes that feed extra electrons into relevant compartments is promising for the treatment of epilepsy and for a surprising range of conditions from Parkinson's disease to pain to depression and inflammation. At least in muscle, hypertrophy and multiplication of mitochondria can occur regalvanising the tissue. More established is the practice of surgically removing epileptogenic foci that may cut out a short circuit that wastes valuable electrons with loss of proton-motive force (see Duncan pp 137–42).

Early systematic intervention in many forms of epilepsy, whether 'pseudo' seizures or surgical candidates before these cycles become engrained in the software, is required.

Truly understanding the sacred diseases and the team effort required to understand underlying mechanisms may lead to conquering many afflictions. Harvey, as a great synthesiser, would be proud if physicians start to see things from an energy perspective and take a systems approach to finding some solutions as we escape from redox slavery. The modern approach to epilepsy is seen as one such beginning.

Reference

1 Pagel W. William Harvey and the purpose of the circulation. *Isis* 1951;42:22–38.