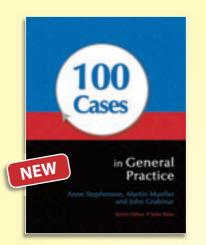
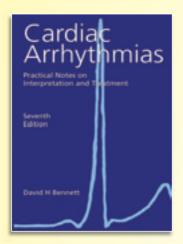
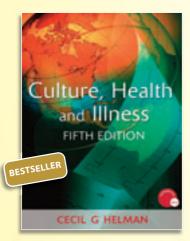




• GMC on beliefs • Writ large • Subarachnoid haemorrhage •













At Hodder Arnold...

- we **produce** trusted, specialist, high quality resources - we **publish** with internationally renowned authorities - we **provide** for students, academics and professionals

Our diverse, established and highly acclaimed lists are ever-expanding – covering medicine, nursing and allied health subjects at undergraduate, postgraduate and professional level.

To browse our full selection of titles, visit www.hoddereducation.com

To claim your 20% special discount, order online and remember to quote promotional code W0000420 at the checkout when prompted.









Keep up-to-date on new books and special offers from Hodder Arnold www.hoddereducation.com/register

ODDER

CONTENTS

IN THIS ISSUE

Back in 2005 *The Observer* newspaper reported on a children's word-search puzzle sheet that had appeared in some hospital and GP waiting rooms. Among the words and phrases hidden among the jumbled letters were: 'no win no fee', 'compensation' and 'claim today'. The puzzle had been produced and distributed by a legal firm specialising in personal injury actions.

It's perhaps tempting to characterise all lawyers who act on behalf of claimants in negligence cases as less than scrupulous, preying on the tragedies of others for the benefit of potentially large legal fees. But this is unfair and untrue. Doctors do make mistakes with sometimes drastic personal consequences – and certainly there are many cases that merit just compensation awards and sometimes in the millions.

What are the circumstances in which such claims arise and how is compensation calculated? On page 14 of this issue we look at a few 'large claims' to see what are the common characteristics.

Also in this issue, MDDUS lawyer Lindsey McGregor provides insight on GMC guidance on personal beliefs and medical practice – the need to ensure individual views do not prejudice the prime duty of care to patients (p. 18). And on page 16, as part of our ongoing Clinical Risk Reduction series, we offer an expert view on the challenges in differentiating subarachnoid haemorrhage from other causes of severe headache.

Just as medical practice evolves and progresses so too must attitudes and ethics. On page 12 Adam Campbell relates a fascinating story of murder and medical paternalism with echoes to recent changes in the law on the retention of human tissues.

Jim Killgore, editor





2 MEDICO-LEGAL HISTORY

Adam Campbell relates the tale of two murdered children afforded dignity after nearly 100 years

14 MEGLIGENCE CLAIMS Major medical negligence claims are still fortunately rare in the UK – what constitutes a large claim?

16 Subarachnoid haemorrhage – beware of an easy diagnosis of migraine in sudden onset of severe headache

18 GMC Doctors have a right to follow their own moral compass – but this must not jeopardise standard of care

REGULARS

4 Notice Board 6 News Digest 8 Law At Work: a fair chance 9 Risk: Hello, doctor? 10 Ethics: To err is human – but not if you're a doctor 11 Q/A: Ian Jackson, GDC 20 Case studies: Adverse drug interaction, Diathermy burn, Negligence in co-proxamol prescribing, Phobic child, wrong tooth 22 Addenda: Common wisdom, Model operating theatre,



Medical word search and Vignette: Dr John Hunt



Cover image: Spanish Window by Barbara Rae. Rae was born in Falkirk in Stirlingshire and studied at Edinburgh College of Art from 1961 to 1965, where she was awarded a travel scholarship, taking her to work in France and Spain in 1966. Rae lives and works in Edinburgh. Art in Healthcare (formerly Paintings in Hospitals Scotland) works

with hospitals and healthcare communities across Scotland to encourage patients, visitors and staff to enjoy and engage with the visual arts. For more information, please visit www.artinhealthcare.org.uk. Scottish Charity No: SC 036222. Photograph: Roslyn Gaunt Editor: Jim Killgore Associate editor: Joanne Curran Editorial departments MEDICAL Dr Gail Gilmartin DENTAL Mr Aubrey Craig LEGAL Simon Dinnick RISK Peter Johnson Please address correspondence to: *Summons* Editor MDDUS Mackintosh House 120 Blythswood Street Glasgow G2 4EA jkillgore@mddus.com Design and production: CMYK Design 0131 556 2220 www.cmyk-design.co.uk Printing and distribution: L & S Litho

Summons is published quarterly by The Medical and Dental Defence Union of Scotland, Registered in Scotland No 5093 at Mackintosh House, 120 Blythswood Street, Glasgow G2 4EA. • Tel: 0845 270 2034 Email: • General: info@mddus.com • Membership services: membership@mddus.com

• Marketing: marketing@mddus.com • Website: www.mddus.com The MDDUS is not an insurance company. All the benefits of membership of MDDUS are discretionary as set out in the Memorandum and Articles of Association. The opinions, beliefs and view points expressed by the various authors in Summons are those of the authors alone and do not necessarily reflect the opinions or policies of The Medical and Dental Defence Union of Scotland.

NOTICE BOARD



GP indemnity and H1N1 virus outbreak

GP members of MDDUS should be reassured that their continuing membership and present subscription will give them full indemnity protection throughout the current period of viral pandemic.

Numbers affected by the virus are small at present and do not yet appear to have had significant effects on workload, staff health or ways of working.

Membership of MDDUS will always provide access to indemnity for work carried on as part of 'normal' general practice. This applies even to work carried out by GPs which in the special circumstances of a significant pandemic may vary from accepted normal practice.

Given that GPs adhere to and take account of all guidance and advice offered by the NHS, GMC and MDDUS, there should be no increased exposure to either complaints or claims for damages for clinical work undertaken to assist the public in a time of a major pandemic.

If there are extraordinary circumstances, for example a massive and catastrophic absence of hospital staff through sickness such that GPs may be asked to undertake work which would not normally be regarded as general practice,

our discretionary indemnity would allow us to completely cover such doctors and provide the security of knowing they are protected. If a GP is employed by a health authority then NHS indemnity would normally apply.

Be reassured that all members will be protected by their membership of MDDUS. Dr Jim Rodger, Head of Professional Services, MDDUS

GDC issues flu pandemic guidance

New guidance on the obligations dental professionals have to patients during the swine flu pandemic has been issued by the GDC in the wake of the World Health Organisation declaration on H1N1 influenza.

Pandemic status means some dentists may be asked to provide treatment at specialist centres. They may also be asked to continue providing treatment to nonsymptomatic patients in their practice or to take part in "other forms of healthcare delivery".

A spokesman said: "GDC guidance emphasises your professional duty to put patients' interests first, taking account of your health and safety commitments to your teams.



"If you are asked to do something which is outside your normal area of practice, you need to be sure that you are competent to do it and check that you are covered by indemnity."

The GDC emphasised dentists should not put patients at risk if they themselves show flu symptoms. If they become unwell, it is advised to "follow appropriate advice" including any local measures in place.

Arrangements for healthcare delivery during a pandemic have already been made by the various departments of health as well as local organisations that commission health services. Dental professionals should keep in touch with local NHS authorities and check their websites for up-to-date information.

Access the GDC guidance at www.gdc-uk.org

IN BRIEF ELIMINATE TIME WASTERS

Sign up now for the MDDUS workshop on time management to be held in Glasgow on 4 September. This highly interactive and reflective workshop will enable you to recognise the full impact of poor



time management and help fix personal and organisational time wasters in your practice. You can also sign up for our assertiveness workshop on 17 November also to be held in Glasgow. Email education@mddus.com to book a place.

NEW WORKSHOP FOR HEALTHCARE ASSISTANTS

MDDUS is planning a new one day workshop for healthcare assistants on 'Risks in General Practice'. It will cover relevant topics such as HCAs' changing roles, accountability, medical negligence, record-keeping,

NOTICE BOARD

MDDUS welcomes new professional staff

OVER the last few years MDDUS has enjoyed impressive growth in membership as more and more doctors and dentists positively choose us as their medical or dental defence provider. We can now claim to be a truly national organisation representing members in all parts of the country. We believe that the value for money we offer through a combination of competitive subscriptions rates and a consistently high quality of service has been the key to this growth.

To ensure that members continue to enjoy a first class service, the Union has increased its professional staff. In the Medical Division, Dr Barry Parker is joining us as a full-time medical adviser, having worked as a practising GP for the last 19 years and more recently as a GP appraiser. Dr Susan Gibson-Smith will also be joining the Medical Division as a part-time adviser. She has been a GP for 13 years and currently works in a training practice in Govan, and is a GP appraiser and vocational studies tutor to medical undergraduates. MDDUS medico-legal adviser Dr Mary Peddie has increased her hours and now works full-time with the Union.

In the MDDUS Dental Division, Claire Renton will be joining us as a part-time dental adviser. Claire has a wealth of experience in undergraduate education as well as general dental practice.

Joining our in-house Scottish Legal and Claims Division is Lindsey McGregor, a highly skilled medico-legal lawyer with many years' experience working with MDDUS members in her previous position at the law firm of Shepherd and Wedderburn. We will also be adding to our London legal team with the appointment of Clare Pearce, who brings excellent experience of NHS and private healthcare law. Lindsey and Clare will complement our existing in-house services which now provide the Union with a legal expertise second to none, as well as generating significant savings by reducing our reliance on external law firms.

Professor Dickson, the Chief Executive, said: "As a membership organisation dedicated to providing its members with the highest possible quality of service, our staff are the key to our continuing success. I am delighted to welcome these new members of the team who join our highly experienced staff."



Extended cover for dental practice nurses

In June of this year MDDUS extended the protection provided to dental practice owners or employing principals with an added benefit of GDC representation for employed dental nurses.

In 2008 it became a requirement for all dental care professionals (DCPs) including dental nurses to be registered with the GDC. Dental nurses must now maintain registered status in order to be legally employed by a practice and any allegations of impaired fitness can put that registration at risk. Our new extended protection means that employed dental nurses enjoy access to the same advice and representation provided to GDP members, as long as any incident relates to their normal dental nursing duties.

To qualify for this extended coverage all the dental practice principals or owners in the employing practice must be members of MDDUS. This new benefit is a significant extension without any additional cost to the basic indemnity offered to principals/owners covering dental nurses and other staff.

MDDUS offer a Dental Practice Scheme Membership in order to ease renewal administration and ensure continuity of membership. Please contact the Membership Department for further details or any other questions regarding our Dental Practice Scheme.



Update your contact details

Do we have an up-to-date email address and mobile telephone number for you? It's important that MDDUS is able to contact members if necessary – and possibly at short notice. So please email membership@mddus.com with your name, membership number and mobile telephone number to allow us to update your contact details.

confidentiality, consent, chaperoning, results handling and health and safety. Contact us by telephone on 0845 270 2034 or email education@mddus.com to register interest. EARLY BIRD DISCOUNT: RCGP

EARLY BIRD DISCOUNT: RCG CONFERENCE Delegates registering now for the RCGP Annual National Primary Care Conference 2009 may be eligible for an 'early bird' discount rate until 27 July 2009. The conference takes place at the Scottish Exhibition and Conference Centre in Glasgow from 5-7 November 2009. MDDUS is the principal sponsor. **NEW ASSOCIATE EDITOR** Joanne Curran has joined the MDDUS publications department as associate editor. She is an established journalist with a degree from Stirling University and eight years' experience working on both daily and weekly newspapers. Joanne will be helping to edit *Summons* as well as launch a number of new MDDUS titles aimed at specific membership groups. See more details later this year.

NEWS DIGEST

Gender shift in medicine



WOMEN doctors will outnumber men in the profession by 2017, according to a major new report.

There will also be more female than male GPs within four years in a massive shift in medicine's gender balance. But, despite the surge, research from the Royal College of Physicians reveals women are still not reaching the most senior roles.

The two-year review showed that women currently make up 40 per cent of all doctors and 28 per cent of consultants. Just over two-fifths of GPs are women but they are expected to be in the majority by 2013 if current trends continue.

Women already account for 47 per cent of UK-trained consultants aged 30 to 34 but "very few" female doctors sit on NHS Trust boards or chair professional committees. The report found just two of the 34 medical school deans were female and six medical schools had no female professors at all.

The report was published as one of the country's most influential GPs, Dr Iona Heath, won her campaign to be president of the Royal College of General Practitioners. Dr Heath, who works in Kentish Town, North London, was elected to replace outgoing president Professor David Haslam.

The Royal College of Physicians' report also revealed most women favour part-time and other forms of "flexible working". The report said the changes would become a "major issue" for the health service in terms of continuity of care.

Professor Jane Dacre, chair of the report's working group, said: "The combination of

these changes in the medical workforce will need to be examined to ensure the continued delivery of high quality care and the best use of the considerable talent available in today's medical profession."

But she said problems could be avoided provided patients had the flexibility to choose which GP they wanted to see.

Rise in GMC FTP referrals

NEW statistics published by the GMC reveal an 83 per cent rise in referrals from case examiners to fitness-to-practise (FTP) hearings in 2008

A total of 359 doctors were referred to hearings by case examiners in 2008 compared to 196 in 2007. This has prompted concerns that the switch to the civil standard of proof has exposed GPs to a greater risk of sanctions. The GMC saw only a slight rise in cases overall but the proportion of those referred to FTP hearings rose by almost two-thirds – from 17 to 28 per cent.

The GMC insisted that it was the nature of the concerns being referred to the GMC from the NHS and the police that accounts for the higher rate of referral. It insists that there is no evidence the move to the civil standard of proof has had any bearing. *Source: Pulse*

November licence deadline

THE GMC has announced 16 November as the date at which all doctors will need a licence in order to practise medicine in the UK.

The licence is in addition to GMC registration and will be required to undertake any form of medical practice in the UK, including writing prescriptions, holding a post as a doctor in the NHS, and signing

death and cremation certificates. Some doctors, such as academics or researchers, will not need a licence to carry out their jobs and may choose to hold registration without a licence.

The GMC has been contacting all doctors on its register since April to find out whether they wish to take a licence.

In June, GMC Chair Professor Peter Rubin said: "We have received a good response to the licensing campaign, having asked 225,000 doctors whether they want a licence to practise. So far, almost 50 per cent of doctors have responded, with the vast majority choosing to take a licence".

Further information of licensing can be found in a GMC guide, *Revalidation: information for doctors and frequently asked questions*, which can be accessed at www.gmc-uk.org/revalidation



Early management of head injury

DEBATE on the management of patients with apparently minor head injuries who can still suffer life-threatening or disabling consequences has in part prompted new guidelines from the Scottish Intercollegiate Guidelines Network (SIGN).

Trauma is the leading cause of death

IN BRIEF

WARNING ON ORAL GELS Topical oral pain relief gels containing salicylate salts should not be used in children under the age of 16 according to precautionary advice issued by The Medicines and Healthcare products Regulatory Agency (MHRA). The advice is being introduced due to a "theoretical risk" these products could increase the possibility of a child developing Reye's syndrome.

REMINDER ON CPD FOR DCPs

Dental care professionals registering with the GDC before 30 July 2008 will be asked this August to provide evidence of completed CPD in the first year of their CPD cycle. DCPs must complete 150 hours of CPD over every five year cycle. At least 50 of these hours must be verifiable. Letters explaining the process in more detail are being sent out in the first week of August. For further details go to www.gdc-uk.org END OF LIFE CARE A consultation on new draft quidance to support

on new draft guidance to support doctors making difficult decisions on end of life care has been launched by the GMC. *End of life treatment and care: Good practice*

≻

under the age of 45 and up to 50 per cent of these deaths are due to a head injury. In the UK the annual incidence of attendance at emergency departments with a head injury is 6.6 per cent.

The challenge for healthcare practitioners is to determine which patients are at risk of intracranial complications and to identify those patients who will benefit from transfer to neurosurgical care and who should be followed up after discharge.

The revised guideline takes account of new developments in many aspects of head injury management and makes recommendations on pre-hospital assessment, referral to hospital, imaging, and indications for admission. The focus remains on the first 72 hours of care but there is also stronger emphasis on how to plan discharge and what advice to give about follow-up.

Southall loses GMC appeal

PAEDIATRICIAN David Southall has lost his appeal in the High Court to overturn a GMC decision to remove him from the medical register.

The Court supported a decision made by the GMC in 2007 to strike Dr Southall off the register for serious professional misconduct. The GMC ruled that he had abused his position by accusing a mother of drugging and murdering her son. The 10-year-old hanged himself in 1996. Southall was accused by the panel of having a "deep-seated attitudinal problem".

GMC director of standards and fitness to practise Paul Philip said:

"The vast majority of doctors in this country do an excellent job often in difficult circumstances. This includes paediatricians engaged in essential child protection work. Like other doctors, they need the confidence and support of the public.

"But where our standards have not been met, we must – and will – act to protect patients and the public interest."

OPINION



by Dr Ivor Felstein Retired Consultant Geriatrician

Ecclesiastes was right...

Never a great optimist as a boy I did always hope that Ecclesiastes was wrong. I refer to the famous saying of the 3rd century teacher: "there is nothing new under the sun". So at school I took heart when studying science lessons that here was something that did indeed promise everlasting variety. Entering medical school I was almost certain I could now ignore Ecclesiastes' famous caveat.

One particularly promising area of reassurance was the cut and thrust of pharmacology. 'R and D' studies and trials had transformed the formerly pocket diarysized British National Formulary of the early 1950s. Gone were the old poly-pharmacy recipes of unsure medication with uncertain side-effects. The later 1950s generation and onwards clutched an ever-enlarging BNF volume of effective, disease-sensitive medications showing new therapeutic bite with low risk or possibly even no risk of undesirable side-effects. (Although, to be fair, a doctor who taught us pharmacy in the mid-20th century suggested that any drug claimed to have absolutely no sideeffects at all was unlikely to be truly doing its job...)

Still, something should have alerted the pessimist in me – especially on reading a short message imprinted (tongue in cheek) on the fly leaf of an American critique of new drugs. It read: "hurry up and use these drugs before they stop working...!"

Over the years I have learned it is truly unwise to readily dismiss ancient wisdom. One particular instance comes to mind. Long ago when I was in my fourth month as a house doctor, a consultant told me to prescribe a new specific hypotensive medication for a young adult patient. I had only recently heard of this drug, enthusiastically advised as part of the new dawn of chemistry in medicine. Prior to that time, there was no specifically effective antihypertensive drug. Prolonged bed rest, weight reduction and various sedatives lowered high blood pressure a little for a limited time. The side-effects of sedatives increased with dosage, making for example, driving, machinery working and swimming a menace. In most patients, sedative 'control' of BP departed once the patient returned to active life.

Now at last we had a selective drug, non-sedating, that could change all that. After two days, the patient's BP readings were settling – even better by the third day. On day five, the young man rose from his bed without notice, went to the nearby indoor toilet, and then dived through the open bathroom window to his sudden death on the concrete, several floors below. He had taken his own life. There was no prior history of depression or suicidal tendency. The culprit proved to be a depression-inducing side-effect of the new hypotensive chemical, presumably not picked up in pre-release studies. The drug was later withdrawn by the drug's manufacturer.

Our profession was forced to recognise the risk of what the Americans called 'suicidality', even with the most regularly beneficial drugs. This, in turn created pressure on drug manufacturers and distributors to draw attention to risks as soon as these are revealed, and to offer safety updates readily and regularly.

Fast forward now 50 years. In reading a recent edition of an overseas medical journal I found Ecclesiastes haunting me once again. The journal reported as follows: converting protective drugs information into "balanced, comprehensible recommendations", transmitted successfully to prescribers and patients, may yet be a pot pourri of "unduly scary alarms and false reassurances".

Twenty-first century medicine still faces the same dilemmas regarding benefits versus risks for individuals on the receiving end of drug treatment. Truly there is nothing new under the sun – or is that just the pessimism of an 'ancient'?

in decision-making will be issued to all UK doctors next year. The document also aims to help patients and the public understand what they can expect from doctors involved in caring for the dying. To take part in the consultation go to: www.gmc-uk.org **SEXUAL BOUNDARIES** Guidance for both patients and doctors on maintaining sexual boundaries has been issued by the Council for Healthcare Regulatory Excellence (CHRE). The new guidance sets out how patients can protect themselves and links to advice for professionals, employers and training bodies.

Access at www.chre.org.uk CHILD PROTECTION TOOL KIT

The BMA has published new advice encouraging doctors not to delay taking action when dealing with children at risk. *Child*

protection – a tool kit for doctors has been developed to provide extra assistance for doctors and their teams. Access at www.bma.org.uk

More news and MDDUS events at w.ww.mddus.com

LAW AT WORK



IN A RECENT criminal court case, a man was convicted of indecent exposure having entered an interview room naked (but for a clipboard) to the natural consternation of the female interviewee for a vacancy. His defence was that this constituted a 'test' of the candidate's reactions under stress. The court was unconvinced.

However, even under less controversial circumstances, selecting the right person for a vacancy, promotion or even (in these days of retrenchment and cutback) for a surviving post, in competition between redundant staff, is fraught with legal and practical difficulties for practices.

Decisions in recruitment and selection are vital to the effectiveness of organisations, and maintaining the credibility and fairness of any selection system is essential to preserving the reputation of the organisation. The most pressing problem for employing organisations is ensuring that subjectivity is eliminated from such decisions, so far as is possible – given the involvement of human beings in the process.

Employment tribunal case law is strewn with successful claims of discrimination arising from recruitment and selection decisions which, with forethought, might easily have been avoided by the employer.

Why applicants were ever asked about potential gynaecological problems, intentions to start a family or to get married, difficulty in working with people of a particular race or religion or the candidate's drinking habits is a mystery to most objective observers – but all of these questions have been asked of applicants for employment over the years and have resulted in successful litigation.

Questions in a selection process can be searching and personal – provided that they are relevant to the skills, aptitudes and demands of the job. For example, if a job requires that the post holder travel away from home at very short notice or that they stay on to work overtime with no notice at all (a police officer involved in a stakeout or

a social worker assisting a vulnerable client in a crisis, for example), then questions about whether the candidate has family or caring responsibilities, which constrain their flexibility in working hours, are not only reasonable but, arguably, essential to ensure that the

right person is selected. The same questions to candidates for a typical clerical job or a cleaner post would not only be irrelevant, but potentially discriminatory.

Similarly, questions about health and disability can be legitimate – provided they are framed in the context of the physical or mental demands of a job or in the context of a genuine enquiry about whether adjustments to the working arrangements need to be made to reduce or eliminate the impact of the disability.

It may sound obvious, but the starting point for any selection process for a post must start with an assessment of the qualifications, skills and experience that will make up the person specification for the job. These requirements can be subdivided, for selection purposes, into 'essential' and 'desirable' criteria. Where candidates do not provide evidence of their suitability against the essential criteria, they should not be interviewed. Those who pass the first hurdle can then be assessed, in competition, against the desirable criteria. If you find yourself asking questions which are not aimed at probing for evidence of compliance with the person specification, then you should pause and consider why you are asking the question. If you cannot give a sound reason for asking the question then it is probably prudent not to do so.

A good example is: "What school did you go to?". This question, which is commonly asked on application forms, is potentially tricky from a legal viewpoint. The name of the school may indicate the likely religion of the candidate, for example. The essential question is about the qualifications obtained by the candidate – not where obtained. Why invite needless trouble?

Another useful technique for avoiding legal risk is to separate the candidates' personal details (name, age, gender and any questions about race, religion, sexual orientation or disability – asked for equal opportunities monitoring purposes) physically from the rest of the application form so that decisions on suitability are

'Questions about health and disability can be legitimate ... in the context of the demands of the job' taken purely on information supplied about qualifications, experience and demonstrable skills. This not only has the benefit of concentrating the minds of those selecting the shortlist but also ensures that, if

challenged about discrimination in the selection process, the organisation can clearly demonstrate that no such bias was evident – because the selectors were ignorant of the candidate's personal details.

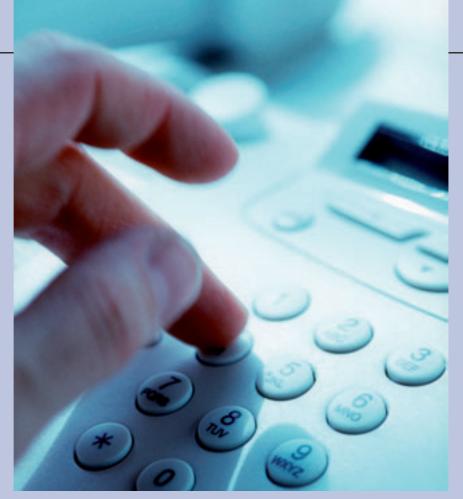
If interviews are similarly focused on gathering evidence about suitability – as opposed to chatting aimlessly or, at worst, asking perilously irrelevant questions – then the subjective aspects of the process can be reduced as far as possible.

Oh and keep your clothes on!

Ian Watson, Law At Work



Law At Work is MDDUS preferred supplier of employment law and health and safety services. For more information and contact details please visit www.lawatwork.co.uk



Hello, doctor?

THE TELEPHONE WAS invented in 1876 and it was only three years later that the first relevant medical use was noted in *The Lancet* (a child with respiratory symptoms). Since then there has been an inexorable rise in the use of the telephone between doctors and patients – with an accelerating trend in recent years.¹

Latest data suggest that 10-20 per cent of all daytime contacts between patients and GP surgeries happen on the phone. Some practices now use the telephone to screen all patient requests for daytime appointments for 'new' problems using a service called the Stour Access System.²

In secondary care, the phone is used to allocate patients to clinics (more or less formally triaged) and for follow-up by phone (e.g. test results, response to medication, etc). First contact in out-ofhours (OOH) GP services is usually by phone and a significant proportion of cases are managed via telephone. Dental emergencies – at least OOH – are formally screened on the telephone and dentists use it in follow-up of some patients.

So do patients approve? The answer is probably 'yes' but only just so long as they see the telephone as an addition to face-toface service rather than as a barrier to access. A well-run telephone consultation option is part of modern primary care.

Where do the clinical and medico-legal risks arise? No published studies look specifically at this important matter and it is rarely mentioned in case reports. Understanding comes from research into the mechanics of telephone consultations, opinions from experienced teachers and researchers and (importantly) from the reports of medical defence bodies (e.g. MDDUS) and the NHS ombudsmen.

Three themes tend to recur: failure to see the patient, failure to pass on important information (e.g. a test result) and failure to provide sufficient advice in the event of a deterioration. There are certainly ways to minimise such risks in telephone consultations. A sound structure for clinical encounters by telephone is similar to that in face-to-face consultations. We need to: • establish the clinical facts

- understand the patient's perspective
- "examine" (ask the patient or other third
- party to describe things, e.g. skin lesions)
- come to a decision about what is going
- on and tell this to the patient
- offer some explanation

- predict the future course of the illness
- hatch a management plan
- ensure that this plan is understood
 create a safety net in case things don't go as well as we hope.

RISK

Of course, the lack of both proximity and visual clues means that we need to adjust our behaviour. In dealing with patients on the phone it helps to talk more slowly and clearly (the 'telephone voice'). You should ask more questions (to be certain about the facts) and ensure the patient clearly understands what is being said. Seriously consider asking the patient to write down the details of any management plan and what to do if things don't happen as expected (i.e. the safety net).

In the event that either the clinician or the patient remains unsatisfied after completing these steps, it is wise to arrange a face-to-face consultation. Even if you are going to see the patient, some attention to the above steps remains necessary – e.g. a two hour delay before physical consultation is long enough for deterioration in acute cases.

The telephone can also help us to reduce risk – notably by passing on the results of investigations and assessing progress in follow-up. It may be easier to telephone a patient three weeks after an outpatient clinic, say, than it is to have the patient attend another clinic. Most GP surgeries have a system for logging all results and ensuring that they are communicated to patients. The telephone can make this task more manageable.

It's clear that patients benefit from an appropriate and well-run telephone service. A short paper by Car and Sheikh³ offers an excellent summary and I finish with their key risk management recommendations:

staff training for all involved

• standardised protocols for managing common scenarios

- dedicated telephone time for clinicians
- increased and improved documentation
- low decision threshold for organising face-to-face consultations.

Dr Malcolm Thomas is a GP and founder of the training company EPI

REFERENCES

1. Males T. Telephone consultations in primary care. London: RCGP; 2007

2. www.stoursurgery.co.uk

3. Car J, Sheikh A. Telephone consultations. BMJ 2003; 326: 966-9

ETHICS

To err is human – but not if you're a doctor*

A RECENT EPISODE of the BBC daytime drama series *Doctors* – set in a GP group practice – featured a doctor who failed to spot the tell-tale symptoms of angina in a patient.

Luckily, her professional instincts rang alarm bells and she got to him shortly after he suffered a heart attack, saving his life.

How realistic is that scenario? Doctors are undoubtedly human like the rest of us. It's just that clinical mistakes can have dire consequences. Mention Dr Melody Bell's failure to spot a condition to any doctor and you'll hear them muttering "there but for the grace of God, go I...".

NHS figures suggest that 850,000 patients suffer what experts call "adverse

events" every year: clinical negligence, missed diagnoses, medical mistakes and more. The toll in terms of human grief and misery is incalculable. The cost to the NHS – in effect, a cost to us – is around £6bn. But doctors suffer too.

As Sir Liam Donaldson noted in a recent *Scrubbing Up* (online BBC News Health page), victims of medical mistakes want an apology and an assurance that the mishap won't recur. Yet the current blame culture in healthcare risks crushing individual medics for one regretful error.

Failure a 'team effort'

Take the case of Dr A, a surgeon who mistakenly removed a functioning kidney. At a hearing of the doctors' regulator, the General Medical Council, he admitted his fault. The GMC panel hearing his case accepted that shortcomings by his hospital had contributed to the mistake. It acknowledged that support from the hospital was poor. It observed that doctors. nurses and managers all communicated badly, leaving our medic - and through him, the patient - vulnerable. Failure was "a team effort". But it was the surgeon who took the rap. He was found to have seriously failed in his clinical responsibilities and suspended for a year.

Consider also the experience of Dr B, a

'They don't set out to slip up. Yet the consequences for a doctor who blunders may be dire...' e experience of Dr B, a young GP who was called to the home of a 15-yearold girl complaining of a severe headache, fever and pains in her legs. The GP examined the girl for any rash or bruising, the tell-tale signs of meningococcal septicaemia – a bacterial

infection of the blood, commonly known as blood poisoning and didn't see any. He did the right thing in examining her, but crucially made no medical note of it.

'Not reckless'

Medical tragedies are awful disasters for patients and those near to them. This is

what makes the practice of medicine unique. Patients rightly trust doctors. The point is, doctors tend not to be reckless. They don't set out to slip up. Yet the consequences for a doctor who blunders may be dire, particularly if a patient dies.

Being called to give evidence at an inquest is the least of it. They may be suspended from duty, face an NHS enquiry or disciplinary proceedings, and be dismissed. They may be suspended in advance of a GMC hearing, and then "erased" following it – that is, stripped of their licence to practise. The career that they loved is at an end. They can face a police investigation and criminal charges, and a civil trial for negligence. Public vilification is bad enough. Guilt and self doubt are arguably worse.

You might think that one or two of these consequences might follow a professional mistake. But at the MDDUS we have heard of many cases where all have followed.

Yes, doctors have to account for themselves when things go wrong. But perhaps a blame culture is not the best way to encourage them to "fess up" to such mistakes.

And mistakes are so easily made. Just ask Dr Melody Bell.

Dr George Fernie, Head of Medical Division, MDDUS

* Article published 15 April 2009 in Scrubbing Up – a regular online BBC News Health column aimed at a mainly nonmedical audience



GDC Director for Scotland Ian Jackson

'I want to get to

know and work

closely with Scottish

healthcare delivery

and policy teams'

IAN JACKSON recently joined the General Dental Council as its first Scottish Director. Mr Jackson comes to the role after working 27 years for BT, though he has spent his entire career in client and public facing roles. "In my first post as a graduate trainee I drove a milk float and then managed a pub as part of my training," he says. At BT he was involved in business development, recruitment, training, consultancy and latterly stakeholder management as Partnership Director with BT Scotland. His main prior experience in regulation is as a ministerial nominee on the General Teaching Council Scotland.

Why did the GDC consider it important to appoint a Scottish director?

Since 1999 Scotland has gained more control over a range of matters including many aspects of healthcare and regulation. The General Dental Council wanted to be a part of these changes and we recognise that there are different needs across different parts of the UK. So that's why I'm here. I want to meet and talk to people in Scotland to help them understand better what we do and how we can help protect them. I also want to get to know and work closely with Scottish healthcare delivery and policy teams. I'll be working to help us understand and navigate the country's political system. I'm working closely with the Scottish Parliament and Scottish Government, members of the public and the dental profession so they realise we're not a London-centric regulator. This is just our first step in targeting our resources more carefully to meet the needs of the four nations of the United Kingdom.

How does the dental landscape in Scotland differ from the rest of the UK?

The dental landscape in Scotland is broadly similar to the rest of the UK. Of course Scotland has Local Health Boards rather than Primary Care Trusts and payment for NHS treatment is different. It could also be argued that the number of smaller communities and the way professionals work to serve them present unique challenges for our registrants. Access to services is obviously hotly debated in Scotland – and while we don't deal with that aspect, we have a very important role to play in ensuring those who are treating patients are up to scratch.

You are not a dentist. Is that a handicap in your position?

No I'm not a dentist – but I am a patient and the GDC's role is to protect

patients and regulate the dental team. While working closely with dentists is a central part of my job, they are only one group of a wide variety of stakeholders – from members of the public through to politicians – who I deal with in this

role. Don't forget that I have access to all the expertise within the GDC, including the practitioners who sit on the GDC council and on our panels.

Will revalidation be an easy sell among Scottish dentists?

The great thing is that dentists working in Scotland are helping take the lead with revalidation – playing a crucial role in our feasibility studies. They're gathering evidence as if they were going through stage 1 of the process. After that, they'll get a chance to give feedback to an independent research company.

We want to work with the profession to establish what the time commitment might be for the process, whether the process we have outlined will work in practice and, if not, how it needs to be changed. We also want to ensure we're asking for the right kind of information. By the end of the year, we'll have a report on that.

Many dentists consider revalidation a sledge hammer to crack an acorn. How do you react to that?

Revalidation is about taking patients' trust in you as dental professionals to another level. Patients need to have confidence that the professionals providing their dental care have not only shown that they're up to standard when they first join our registers, but can show that they remain up to standard over the course

> of their working lives. Revalidation will achieve that. The process will not place burdens on registrants except in so far as it's necessary to protect the public interest. It's also extremely important to stress that things are in their very early stages at the moment. We're still

working out the details of what the revalidation process will consist of and how it will work.

Do you think that healthcare professionals in Britain are in danger of becoming overregulated?

Whether you have to meet health and safety rules or file tax returns, there will always be demands on your time which take you away from the clinical work you probably went into dentistry for. But I doubt any professional would support the view of getting rid of regulation. It has a vital role in protecting patients by setting standards, driving improvements and, in the rare case where things go wrong, tackling failure. Of course, regulators have a responsibility to make sure our roles are clear and we work together so our expectations and aims are aligned.

Dignity long denied

Adam Campbell *recounts a tragic tale of murder and medical paternalism*

T was the strangest thing I've ever done," says Friar Tim Calvert of Edinburgh University's Catholic chaplaincy. "There's nothing else like it." A requiem mass and a service at a crematorium are usually all in a day's work for a Dominican priest. But bearing in mind that the recipients of Friar Calvert's ministrations last May were two boys – brothers John and William Higgins – who had been dead for nearly 100 years, his reaction is understandable.

The service, which ended in the cremation of the boys' heads, stomachs, a leg and an arm each and all of their internal organs, was the final chapter in a tragic story that began almost the day they were born. Murdered by their alcoholic father in November 1911, aged just four and seven, their body parts were later stolen by a leading pathologist of the day and a chief surgeon to the police and put on display in the Forensic Medicine Museum at Edinburgh University, where they remained, unbeknown to family members, until the recent ceremony.

The story of the life and death of the Higgins boys and the century-long limbo of their various body parts is one of alcoholism, poverty, violence and the absence of a social safety net. But it is also one of a paternalistic ethic that thought little of body snatching in the interests of medical science, so much so that the pathologist, Sir Sydney Smith, wrote openly about it in his 1959 autobiography, *Mostly Murder*, unhindered by any sense of shame or wrongdoing.

But then what he had done was not illegal. "Until the turn of this century even the General Medical Council didn't talk about consent being informed. That was a concept that was fairly alien to UK law," says Dr George Fernie, a senior medico-legal adviser at MDDUS. "At the time that these particular body parts were retained, that was the



norm. It was thought that you were actually protecting the relatives by not telling them."

Indeed, it was to remain the norm for some time to come. It wasn't until 1996, when a mother discovered that her deceased daughter's heart had been kept without her knowledge by the Bristol Royal Infirmary, thus sparking an inquiry, that bereaved relatives became aware that their loved ones' organs were being routinely retained without their knowledge in hospitals around the country. The resulting scandal ultimately led to the Human Tissue Act 2004 and the Human Tissue (Scotland) Act 2006, which firmly enshrined the concept of informed consent from relatives for the retention of body parts.

Exceptional specimens

But that all came too late for the Higgins brothers, whose remains were considered too scientifically valuable to be left intact by Sir Sydney Smith and his colleague Professor Harvey Littlejohn. When the pair were called in June 1913 to Linlithgow to do an autopsy on two unidentified bodies found in a flooded quarry in nearby Winchburgh, they were presented with what Smith described in *Mostly Murder* as "two exceptional specimens" of adipocere. Eighteen months in the cold quarry water, with an absence of oxygen and the presence of lime had caused the normally semi-fluid body fat to be converted to a firm, soap-like substance, which Smith described as "like mutton suet".

It was a rare find. The facial features were completely unrecognisable, even as to gender, but so well preserved were the bodies that Smith soon determined they were boys aged between three and four and between six and seven at the time of death.

MEDICO-LEGAL HISTORY





Main picture: the flooded quarry where the boys were found is now Hopetoun Fishery Above: Sir Sydney Smith. Below: Professor Harvey Littlejohn



He even found whole green peas, barley, potatoes and leeks in their stomachs – the Scotch broth that had formed their final meal.

Smith's findings led the police quickly to determine that they were William and John Higgins who had disappeared 18 months earlier. Their father, Patrick Higgins, had claimed, and been believed, that they had been whisked off to Canada by a woman who had adopted them on the spot in a train carriage on the way to Edinburgh.

The story that was eventually pieced together by the police, however, was a much darker one. Higgins, an alcoholic ex-soldier, had for some time been trying to offload responsibility for the boys, whose mother had died in 1910. Soon after their mother's death, the boys were getting relief from the Inspector of Poor at Wemyss in Fife and in January 1911 they were taken into the poorhouse in Dysart. When Higgins refused to pay for their upkeep, he was jailed for two months for wilful neglect. On his release in August, Higgins collected the boys and took them to Winchburgh, where he worked as a labourer at a local brickworks.

One rainy night in November, Higgins was seen walking to the east of Winchburgh with the boys. It was the last time they were seen alive. Only 18 months later when their bodies were found by two ploughmen did the truth of what happened that night come out: he had tied them together with window cord and pushed them into the waters. In their investigations the police even managed to find someone who remembered giving the boys that last meal of Scotch broth.

The boys were buried and Higgins, found guilty of their murder, was hanged at Calton Jail on 2 October

1913. To all intents and purposes, the matter was closed. But as we now know closure was a long way off, for what the rest of the family did not know was that the contents of their coffins were considerably less than was thought. It would not be until 2007, when a genealogist, Chris Paton, was helping an American, Maureen Marella, trace her Scottish roots that a relative of the boys would discover what had taken place after Smith had completed the autopsies.

Having discovered that Marella was the boys' distant cousin, Paton directed her to the chapter in *Mostly Murder* that described the incident. Smith wrote: "When I was doing the autopsies at Linlithgow I thought we ought to keep a specimen of such perfect adipocere formation for teaching purposes."

At Smith's behest, Littlejohn persuaded the policemen to go outside with him. Smith then removed the boys' heads, stomachs, a leg and an arm from each of them, and all of their internal organs, and parcelled them up. Before the police returned, he wrote, "I put the remains in the coffin provided, and screwed down the lid."

Smith left nothing out of his grisly account, even describing how he transported the "purloined" body parts back to Edinburgh University in a crowded train. "We had the window open, but pretty soon the other passengers began to wrinkle their noses, sniff, and look at one another's boots. No wonder, for the smell was mephitic."

Fitting end

Paton contacted the university on Marella's behalf and discovered that the remains were still being held in the display cases in which they were first put nearly 100 years before. The boys' horrified cousin demanded the return of the body parts so they could have a Christian burial.

Professor David Harrison, the university's head of pathology, sought advice and in the light of the recent legislative changes was only too happy to release the remains into the hands of the family, which culminated in the religious service in May.

A century later, the chances of a similar thing happening are remote, says Dr Fernie: "You never get a 100 per cent perfect system. But I think the Human Tissue Act is pretty sound. Not only does it let the public know that there is a robust piece of legislation to protect their interests, but doctors know precisely what's expected of them."

It's all 100 years too late for William and John Higgins, but at least their relatives have now seen some kind of closure. Says Father Calvert: "These children were let down by so many people, not just their father. What we wanted to do was surround these remains with as much dignity as possible. And so provide a fitting end to the story."

Adam Campbell is a freelance writer and regular contributor to Summons. He lives in Edinburgh.

Expensive payouts for major medical negligence claims are still rare in the UK – fortunately. So what characterises the large claim?

ACH year thousands of medical negligence claims are made by patients in the UK against hospitals, health boards, trusts and individual doctors and dentists. Most cases are abandoned by claimants or settled for relatively modest amounts (under £10,000). But some will exceed £500,000 with a few rising into the millions. Fortunately such massive payouts are rare. Otherwise the costs would be crippling both to the NHS and medical defence organisations who represent individual doctors and dentists.

Keeping abreast of the potential risk posed by large claims is of prime importance to the MDDUS. The Union employs actuaries to estimate future settlement and legal costs to ensure the Union has more than sufficient funds to cover such claims - both known and not yet intimated - on behalf of our members. It is equally important for MDDUS to consider what are the common characteristics of large claims and encourage proactive risk management - as far as is possible.

Among the main factors that drive up the cost of claims as a result of medical mishaps or errors are potential lost future earnings and the costs of ongoing care to patients.

A career ended

In 1996, a world-class Latin dancer named



Kerstin Parkin was looking forward to a lucrative career as a teacher and choreographer alongside her husband and former dance partner. But in November of that year she suffered a heart attack after having a fit during the birth of her first child at Farnborough Hospital in Kent. The incident left her severely brain damaged and confined to a wheelchair.

In the resulting court case, Parkin's QC alleged that the incident arose from "profoundly substandard care". Hospital staff failed in providing "basic first aid" and a cardiac team was unable to reach the patient because they did not know the security code to enter the ward.

The 38-year-old received £12.4 million in compensation, the largest single payment made yet by the NHS in England. The payment reflected the cost of longterm care but also the lost earnings Parkin could have expected in the course of a normal career. This factor also contributed to the recent £5 million settlement to The Bill actress Leslie Ash, who contracted

MSSA after being treated for fractured ribs at the Chelsea and Westminster Hospital in 2004. Ash suffered paralysis as a result and now walks with a cane. Most of the value of the award was based on past and future loss of earnings as an actress.

Supported care for life

More common to large claims are costs to support life-long care in severely disabled patients. One recent example was resolved in March of this year when ten-year-old Jordan Giles was awarded £5.25 million in an out-of-court settlement for cerebral palsy attributed to medical negligence during his birth at Vale of Leven Hospital in Dunbartonshire. It was Scotland's largest compensation payout to date.

The funds will be used to help provide full-time support and also to buy special equipment and adapt a new house for Jordan. The rest is to be kept in trust for the boy with court officials monitoring how the funds are to be spent.

Cases involving birth trauma are



common among very large claims. At MDDUS, complications in pregnancy and labour constitute the highest percentage of estimated large claims (> £500,000) currently 'active' (see box). Courts justify high payments in such cases because surviving children can be left profoundly disabled and yet often with near-normal life expectancies. The cost of specialist care and support for these children long-term

COMMON LARGE CLAIMS

- Meningitis
- Complications associated with pregnancy
- Complications associated with birth
- Head injuries
- Brain haemorrhage including SAH
- Cauda equina
- Complications associated with fractures
- DVT
- Spinal surgery

can be overwhelming for families. Damages of over £5 million are not uncommon and the NHS Litigation Authority (NHSLA) in England and Wales estimates such cases account for 60 per cent of all its claims.

Calculating loss

Courts in the UK tend to be pragmatic in awarding compensation to claimants and this is also reflected in negotiated settlements. A recent case from MDDUS files involved a delayed diagnosis of meningococcal septicaemia. A GP failed to refer a 15-year-old with severe flu-like symptoms to hospital despite being told that the patient had previous contact with a schoolmate suffering from meningitis. The teenager suffered complications and had to undergo bilateral below-knee amputations in both legs and later partial amputation of both thumbs and some fingers.

MDDUS lawyers and experts deemed the case indefensible and negotiated a substantial settlement on behalf of the member taking into account both "total past loss" to the patient's family and the cost of future care. The agreed 'Schedule of Loss' included various costs from lost earnings to the parents to modifications to the family home such as a chair lift and a downstairs shower. Future costs took account of potential ongoing needs such as prosthetics, special accommodation, wheel chairs and adapted automobiles.

Legal costs and other burdens

Major medical negligence claims can also involve considerable time and resources to investigate and resolve, either by negotiated settlement or in court. Legal costs can be considerable and will include those to the defendant as well as 'adverse costs', or those associated with the claimant's legal team. In order to reduce our own legal costs and provide better value to our members, MDDUS now employs a team of in-house lawyers based both in England and Scotland, rather than relying solely on independent legal firms. Surprisingly, over the last few years the number of all medical negligence claims at MDDUS has fallen. However, this has been matched by an overall rise in costs. Law firms specialising in 'no win, no fee' claims attract disgruntled patients and demand a 'success fee' for large claims often double the normal scale. This means that lawyers acting for patients have an incentive for pursuing only the most potentially lucrative claims.

Another factor that promises to add to the burden on organisations such as MDDUS in dealing with large claims is a possible shift to periodical payments in England and Wales. Traditionally, a successful claimant quantifies their level of damages and the defendant makes a single payment and the case is closed. But lawmakers have decided that this places an unfair burden on claimants in having to estimate future losses and cope with unforeseen economic changes, e.g. high inflation. Any deterioration in the value of their compensation is borne by the claimant.

So from April 2005, amended sections of the Damages Act 1996 introduced the notion of periodical payments. Under the amended law, courts now have the power to make an order directing the compensator to make payment of part of the award in an ongoing series of future or periodical payments. This shifts the burden of future uncertainty to the defendant.

Mistakes happen...

In many ways, cases that result in large claims differ from other medical mishaps only in the consequences. MDDUS can advise doctors in risky circumstances – obstetrics wards, GPs called out to patients ostensibly with flu – to take special care and ensure systems and procedures are in place to reduce risk. But we acknowledge that mistakes will be made and it is our job as a medical defence union to ensure our members are protected should the unthinkable happen.

Peter Johnson is Risk Manager at MDDUS

■ Jim Killgore is editor of Summons

Beware of an easy diagnosis of migraine

Subarachnoid

NEURYSMAL subarachnoid haemorrhage (SAH) is a rare condition with an incidence of approximately 8 per 100,000 per annum in the UK. A GP is unlikely to see more than a few cases over the course of a career but the potential for missed or delayed diagnosis makes it a significant litigation risk.

The mean age for SAH is 51 years. Approximately 50 per cent of patients die of the condition – 30 per cent immediately and 20 per cent from complications in subsequent days or weeks. However, for those with less devastating bleeds there is excellent potential for a good outcome.

SAH classically presents with sudden onset of severe headache. Suddenness of onset is usually the key feature. The headache itself is not always described in dramatic terms, such as 'thunderclap', and the patient may look deceptively well. Early vomiting is common and often followed by neck stiffness and photophobia. More severe cases may have a temporary or prolonged decrease in conscious level, with or without focal signs such as hemiparesis, dysphasia or third nerve palsy. Cardiac abnormalities and ECG changes may result and should not distract the clinician from the complaint of severe headache.

A CT scan performed within 24 hours is well over 90 per cent sensitive for SAH, dropping to about 60 per cent after five days. In the majority of cases with a typical presentation, scanning confirms the diagnosis quickly and easily. Patients with SAH can be graded according to clinical condition: Grade I being fully conscious with no focal signs and Grade V being deeply comatose. Grade I and II patients treated expeditiously have a good or moderately good outcome in 80 per cent of cases. Treatment may be by endovascular coiling by an interventional neuroradiologist, or by craniotomy and clipping by a neurosurgeon.

Medico-legal risk

Unfortunately, the diagnosis may be missed or delayed, especially in fully

conscious patients who look relatively well on presentation. This not uncommonly leads to litigation. Re-bleeding is the most serious potential complication of a missed diagnosis. Untreated, a ruptured aneurysm has a 6-8 per cent chance of re-bleeding within the first 3 days and a 20 per cent risk within 2 weeks. Re-bleeding carries 70-80 per cent mortality.

In a recent analysis of 26 cases of SAH referred for independent medico-legal review, errors of diagnosis were seen in 13 cases, and delays in diagnosis in six. The most common misdiagnosis was migraine. Thirteen of the patients had a fatal outcome and six were severely disabled. In 50 per cent of cases it was judged that a more favourable outcome would have occurred but for the breach of duty of care, and all these actions were successful. In all cases, clinical features were present which would have enabled the clinician to reach the correct diagnosis (Brit.J.Neurosurg, 2009; 23(2):116).

Making the right diagnosis

The initial suspicion of SAH is based on the history either from the patient or from witnesses if the patient is confused or worse. A history consistent with SAH demands emergency admission to hospital even if the suspected bleed was days earlier and the patient appears well.

Example: a patient in her sixties presented to a stroke clinic with a history of sudden onset headache 10 days previously. A CT scan carried out the same day was normal. She was referred by letter to a neurosurgical unit.

If this patient had indeed suffered a SAH and had re-bled during the 2 weeks it took for the letter to arrive at the neurosurgical unit, it would have been difficult to defend the referring clinician's action.

In cases of suspected SAH, a CT scan should be carried out as soon as possible. If this is negative, a lumbar puncture (LP) must be performed. It is crucial that the LP be performed by an experienced doctor

CT scan subtly positive for SAH blood (arrow)

and that arrangements are in place to transport the cerebrospinal fluid (CSF) to biochemistry immediately.

There seems to be a notion that it does not matter much if the LP gives an equivocal or false positive result because the patient can be referred for a CT angiogram anyway. This attitude is bad medicine and betrays a false assumption that if an aneurysm is seen on angiography the patient must have had an SAH.

in sudden onset of severe headache

haemorrhage

Example: a female in her late twenties presented with a history consistent with SAH and a normal CT scan. The LP was done inexpertly, with multiple attempts causing bleeding into the CSF. The CSF itself was not examined quickly enough or properly. By the time the patient came to neurosurgery, it was impossible to determine whether she had bled or not. Angiography was performed which showed small right and left-sided middle cerebral artery aneurysms which were deemed unsuitable for coiling. She underwent bilateral craniotomies for clipping of the aneurysms. At operation, it was clear that neither aneurysm had bled.

Because of a poorly performed LP this patient underwent the risk of two craniotomies. Post-operatively, she complained of poor memory, wound discomfort, scalp dysaesthesia and some cosmetic deficit. She lost her driving licence for 6 months and has a lifetime risk of epilepsy. The aneurysms themselves carried a negligible lifetime risk of rupture, and the patient would have been far better off with a proper LP and no further action.

Diagnosis by lumbar puncture depends upon finding haemoglobin breakdown products in the CSF. The LP should be performed at least 12 hours after the suspected haemorrhage to allow adequate time for red blood cells to lyse releasing oxyhaemoglobin. Three bottles of CSF should be collected. The LP can cause some bleeding into the CSF but if this occurs, the red blood cell count should decrease on the second and third bottles collected.

The first bottle should be sent to bacteriology, the second bottle for cell count and the third bottle sent without delay to biochemistry and centrifuged promptly, ideally within 15 minutes. If the LP has caused bleeding into the CSF, any delay in centrifuging the specimen can lead to false positive results due to release of oxyhaemoglobin. Centrifuging within 15 minutes and examination by spectrophotometry yields zero false positive results. Where the LP is equivocal, it should be repeated without delay and the CSF immediately centrifuged. A negative second LP potentially saves the patient much grief.

Spectrophotometry is advised in all cases to quantify the different blood breakdown products. Oxyhaemoglobin is released at 2 to 12 hours and gradually converted to bilirubin over about 1 week and methaemoglobin after about 10 days. Spectrophotometry is thus positive for 2 weeks though sensitivity drops to 70 per cent at 3 weeks and 40 per cent at 4 weeks.

If a patient with SAH appears very unwell or has a reduced conscious level, an early CT scan is unlikely to be negative. In such cases, a negative CT warrants LP before 12 hours to seek alternative diagnoses such as meningitis.

Risk reduction

• Junior members of staff must be aware of the seriousness of missing a diagnosis of SAH. SAH should be considered in any patient with acute headache and senior advice sought.

• SAH is most easily missed in patients who are fully conscious and these patients have most to lose. Beware of an easy diagnosis of migraine.

A history consistent with SAH requires emergency admission to hospital. There is no place for referral by letter, fax or email.
If the history justifies a CT scan, it justifies an LP if the scan is negative.
The LP must be carried out with care, competence and urgent transport and processing of CSF. This is the last chance to correctly diagnose SAH. Angiography cannot confirm or refute a diagnosis of SAH, no matter what it shows.

• A diagnosis of SAH requires urgent telephone referral.

■ Mr P Barlow and Miss J Brown are both Consultant Neurosurgeons at the Department of Neurosurgery Institute of Neurological Sciences, Southern General Hospital, Glasgow

Approximately 2 per cent of the population have unruptured asymptomatic aneurysms. Most incidental unruptured aneurysms do not justify treatment as the risks of treatment may equal or exceed the long-term risk of rupture. Therefore, it can disadvantage a patient to discover an unruptured aneurysm. Apart from the anxiety caused there can be implications for many other areas of life.

Right to choose, but...

Doctors have a right to follow their own moral compass – but this must not jeopardise patient care. Lindsey McGregor looks at GMC guidance on personal beliefs

N MAY of 2007 a GP in Cornwall gave an interview to the *Daily Mail* in which she revealed that it was her practice to encourage patients seeking an abortion to consider other options, including giving birth. In the interview Dr Tammie Downes said she refused to sign abortion forms – as is her right – but was happy to see women wanting terminations and provide information and advice. She claimed that as a result eight babies were alive today who would otherwise have been aborted.

As a consequence Dr Downes was reported to the GMC accused of using her position to promote her anti-abortion views to patients. The matter was investigated and in July of last year a decision was made not to take the matter to fitness to practise panel. But the involvement of the GMC in this case highlights the need for all doctors to take account of the guidance on personal beliefs contained in *Good Medical Practice* and also in supplementary guidance issued in March 2008.

The core guidance advises that personal beliefs should not be expressed by doctors in ways that exploit patients' vulnerability, nor should they adversely affect the treatment provided. If a conflict does exist and might affect treatment or the advice given to patients, doctors are advised to explain this to the patient so they can decide to exercise their right to see another doctor.

The supplementary advice – *Personal Beliefs and Medical Practice* – expands on this core guidance and reminds doctors that their prime duty is to make the care of the patient their first concern and this must not be prejudiced by personal views or beliefs. Should this not be possible then the onus is placed on the doctor to ensure that arrangements are made for the patient to see another colleague without delay. The guidance aims to balance the rights of doctors and patients – in particular the right to freedom of thought, conscience and religion alongside the entitlement to care and treatment to meet clinical needs.

Specific advice

Abortion is a particularly emotive topic but by no means the only area of potential conflict in the culturally and religiously diverse world in which we live and work. The GMC guidance provides advice in a number of specific areas.

Refusal of blood products. Doctors are advised not to make assumptions about decisions made in relation to the refusal of treatment with blood or blood products as is practised by Jehovah's Witnesses. The views of the patient should be respected and questions answered honestly and to the best of a doctor's ability. It is suggested that clinicians might contact hospital liaison committees established by the Watch Tower Society who are the governing body of Jehovah's Witnesses. They can advise on Society policy regarding the acceptability or otherwise of blood products and provide details of doctors and hospitals who are experienced in 'bloodless' medical procedures.

Circumcision of male children. Doctors asked to carry out this procedure are advised to proceed on the basis of the child's best interests and with consent. An assessment of best interests includes the child's and his parents' cultural, religious or other beliefs and values. Consent from the child if competent is required. If not, then both parents should consent. If there is a conflict then legal





advice should be sought. The benefits and risks should be explained to the parents and child, if competent. A religious advisor may be asked to attend to ensure the operation is carried out in accordance with the faith.

Clothing and other expressions of religious

beliefs. Doctors are advised that if patients feel that a veil worn by a doctor presents a barrier to communication and development of trust this should be responded to and personal and cultural preferences may have to be set aside to provide effective patient care.

Care of patients pre- and post- termination

of pregnancy. Where a patient is waiting or has undergone a termination, a doctor has no legal or ethical right to refuse to provide treatment on the grounds of conscientious objection to the procedure. This applies to any procedure from which the doctor has withdrawn due to his or her beliefs.

Conscientious objection

It is clear from both *Good Medical Practice* and the supplementary guidance that whilst the doctor may have particular beliefs, such beliefs cannot impact on patient care which has to be the doctor's first concern. The option of conscientious objection is protected and provided for with the qualification that patient care should not be compromised and neither should a burden be placed on colleagues.

GMC

The right to conscientious objection is enshrined in the European Convention on Human Rights in article 9 which provides for the 'freedom of thought, conscience and religion'. The Human Rights Act 1998 has ratified this convention in UK law. Such a right is clearly essential in our changing world in order to achieve a balance between medicine and the competing principles of morality which can exist in the doctor-patient relationship. Excusing oneself because of religious or moral beliefs is never an easy option for any healthcare professional, particularly as they may find themselves accused of adding to the workload of colleagues.

In no other time have doctors been more tested, with views on ethics and morality ever shifting in the rapidly developing arenas of medicine, science, politics and the law. Policies on medicine and medical research can change with each new government as political parties change the moral agenda. One particular example is the law on abortion in the USA where President Barak Obama's more liberal views are already dividing Roman Catholic support for him. His relaxation to an order made by President George Bush to grant federal funding to allow limited research to a small number of stem cell strains is another example of how political will can change the moral map.

Universal agreement over such complex areas will never be achieved, but to ensure the integrity of healthy debate in this area there will always be a need for those who are prepared to stand up for what they believe in. The GMC guidance, if followed properly, should ensure that doctors who choose to follow this route are protected from investigation whilst at the same time ensuring that patient care is not jeopardised in the process.

Lindsey McGregor is a solicitor at the MDDUS

If carrying out a particular procedure or giving advice about it conflicts with your religious or moral beliefs, and this conflict might affect the treatment or advice you provide, you must explain this to the patient and tell them they have the right to see another doctor. You must be satisfied that the patient has sufficient information to enable them to exercise that right. If it is not practical for a patient to arrange to see another doctor, you must ensure that arrangements are made for another suitably qualified colleague to take over your role.

Good Medical Practice, paragraph 8, GMC 2006

SUMMER 2009

CASE studies

These studies are based on actual cases from MDDUS files and are published in *Summons* to highlight common pitfalls and encourage proactive risk management and best practice. Details have been changed to maintain confidentiality

PRESCRIBING

Adverse drug interaction

A GP was called to attend a diabetic patient at home. Mr T had for the past 24 hours been suffering from frequency of micturition and in the previous night had developed nausea and vomiting. His blood sugar was high.

The GP examined the patient's abdomen and asked for a urine sample which he checked visually and suspected a urinary infection. He prescribed a short course of trimethoprim and returned to the surgery where he arranged to have the sample sent to the laboratory.

In Mr T's records was a note of pre-existing conditions including ankylosing spondylitis and ongoing treatment for that condition with the drug methotrexate. Treatment with trimethoprim is a known contraindication in patients on methotrexate as it can lead to acute bone marrow suppression.

Mr T took the prescription for two days but his condition grew worse with further nausea. His wife then received a phone call from the GP to say that the lab results indicated that trimethoprim was not the correct antibiotic. He issued a new prescription for cephalexin.

Mr T's condition did not improve and he was eventually taken by ambulance to hospital. He was catheterised and passed bloodstained urine. He required a central line and, eventually, renal dialysis. In time Mr T ended up in the ITU sedated and on a ventilator. He developed septicaemia and it was thought that this may have been due to immunosuppression caused by an adverse interaction between methotrexate and trimethoprim. Mr T eventually recovered but continued to suffer subsequent health problems. Later solicitors acting on his behalf began legal proceedings alleging clinical negligence.

Analysis and outcome

An expert opinion on the case was solicited by the MDDUS. He advised that methotrexate is an immunosuppressive drug that is eliminated largely by the kidneys. In renal impairment the drug can build up to toxic levels causing neutropenia. In examining the patient notes on admission to hospital the expert found that Mr T was suffering from marked neutropenia not present in earlier blood tests. He advised that it was very unlikely that much trimethoprim would have been absorbed in the 48-hour period it was administered, especially if the patient had been vomiting. Nor did he believe it likely that such a limited dose would play a significant role in the development of neutropenia.

In the end the MDDUS acknowledged there had been a breach of duty in prescribing trimethoprim in the presence of methotrexate but denied that the error had contributed in any significant degree to Mr T's illness. A few months later the case was abandoned.

Key points

- Consider potential contraindications in all prescribed drugs.
- A medical error in itself does not amount to negligence; there must also be a causative link, i.e. it resulted in harm.



Diathermy burn

A 46-year-old woman was undergoing sterilisation reversal surgery. In the procedure the surgeon used monopolar diathermy to stop bleeding in the abdominal incision. In preparation for carrying out microsurgery on the fallopian tubes he switched to bipolar diathermy.

Operating first on the right tube he found the bipolar diathermy unit appeared not to be working; he pressed the pedal numerous times without response. He asked the unit be checked and then discovered he had been mistakenly pushing the pedal for the monopolar unit.

The forceps for the monopolar unit had been lying between the patient's legs rather than having been replaced in the diathermy quiver and a hole had been burned through the surgical drapes. The surgeon finished the procedure and then inspected the patient's leg, finding a 1 cm third-degree burn on the inner thigh. He excised this

and sutured the wound, leaving a 3 cm scar.

A month later the surgeon received a letter from the patient demanding compensation for the injury and also for distress caused by the permanent scarring.

Outcome and analysis

A modest settlement was negotiated by MDDUS on behalf of the surgeon.

Key points

• Ensure safety protocols for surgical instruments are in place and followed for all procedures.

• Ensure unused equipment is cleared away and stored in each stage of a procedure.

PRESCRIBING

Negligence in co-proxamol prescribing

FORTY-YEAR-OLD Mrs G suffered from chronic back pain for which she was prescribed co-proxamol as an analgesic. She had a history of alcohol misuse and depression, and records showed two previous co-proxamol overdoses whilst under the influence of alcohol. She had been under the care of the local Community Mental Health Team and continued to be seen regularly by her local GP practice.

In January 2005, the Committee on Safety of Medicines issued guidance to all GPs on the prescribing of co-proxamol, in particular highlighting the risk of death in overdose.

The recommendations stated that the prescribing of co-proxamol tablets should be withdrawn altogether over the next six to 12 months. Interim prescribing advice pending withdrawal stated that co-proxamol is contraindicated in:

Patients who are alcohol dependent or likely to consume alcohol while taking co-proxamol.
Patients who are suicidal or addiction prone.

That February Mrs G consulted with her GP, Dr A, where the issue was fully discussed. Dr A discontinued her co-proxamol and prescribed cocodamol as an alternative. Medical records showed that five months later, a further prescription for 100 co-proxamol tablets was issued to Mrs G by the GP practice, although it was unclear as to which practice GP had issued the prescription.



Two months later Mrs G committed suicide. The cause of death was found to be due to a combination of consumed alcohol and coproxamol. Mrs G was survived by her husband and a teenage son.

A claim was subsequently raised alleging negligent practice in the prescribing of co-proxamol, and this was supported by an expert witness report.

Outcome and analysis

The practice in question consisted of several GPs, and an internal significant event analysis (SEA) was undertaken. This highlighted that although Mrs G's co-proxamol prescription was discontinued it had not been removed from the repeat prescription list. Later when Mrs G requested a repeat prescription of 100 tablets

these were retained by her.

An out-of-court settlement was agreed.

Key points

Remove discontinued drugs from computer records used to generate repeat prescriptions.
Avoid having drugs that require close monitoring on the repeat section of prescription records.

 Review the prescription management system and procedures to prevent such potential errors.



Phobic child, wrong tooth

AN 8-year-old boy attended a dental surgery with his mother, suffering from a painful abscess in a baby tooth (ULE). The dentist – Mr Z – advised the boy's mother that extraction was the best option.

The boy was very nervous. Mr Z managed to administer local anaesthetic but only with difficulty as the child kept closing his mouth.

A few minutes later, after checking that the region was numb, the dentist attempted to extract the tooth using dental forceps. The boy began to squirm and again closed his mouth. Only with reassurance from his mother did he partially open his mouth but access remained difficult. Mr Z readjusted position and proceeded to extract the tooth

The dentist was immediately struck by

the amount of blood. In order not to distress the boy further he placed the tooth on a tissue and asked the dental nurse to dispose of it along with the blood-soaked gauze. On checking the socket again Dr Z realised then that the ULE was still in place and the adjacent premolar tooth (UL4) had been extracted in error.

He immediately explained the situation to the boy's mother. A decision was made with the mother to extract the ULE and this was done with much additional stress for the boy. Dr Z then discussed options with the mother. Re-implantation was not possible due to

the risk of infection as the permanent molar would have to be recovered from the clinical waste bin. He offered to phone the central orthodontics service for an assessment.

The boy was seen by an orthodontic specialist and various treatment options were discussed. The recommended solution was

an upper fixed appliance to close the gap. But both the boy and his mother were unhappy with the prospect of long-term orthodontic treatment. A letter of claim alleging negligence was later received by the surgery from solicitors acting for the boy's parents.

Outcome and analysis

It was judged by MDDUS that the case was indefensible and a settlement was

later negotiated based on potential costs for future care and treatment.

Key points

• Ensure that even obvious protocols – such as rechecking records prior to extraction – are followed to avoid errors.

• Ensure clear line of sight before undertaking any procedure and if necessary count the teeth from the midline to ensure the correct tooth is removed.

ADDENDA

From the archives: common wisdom

IN CASES of medical negligence it's an accepted precept that a doctor's actions must be judged against what is regarded as a reasonable standard of care by a broad range of similar practitioners. In this we can only assume the 'broad range' of opinion is correct. Two centuries ago this was by no means always the case. Consider this description of practice written in 1819 by Dr Gourlay of Lentrathen in Forfarshire, Scotland: "...the existing prejudices among the lower classes prove the greatest obstacle to the efficient practice of the country surgeon; I found it no easy matter to persuade them to the necessity of losing blood for the cure of the fever, the old

people declaring that in their time no such thing was ever allowed or thought of. At my first visit, I found it necessary to bleed as a matter of course, and the flow of blood continued until syncope supervened which, in most, happened upon losing 32 ounces. To some I ordered an emetic of tartrate of antimony but only to those who had a desire to throw up. A dose of calomel and antimonal powder was administered at bedtime as would procure three evacuations from the bowel..."

Quoted from The Healers: A history of medicine in Scotland – *a fascinating book by David Hamilton (2003; Mercat Press Ltd).*



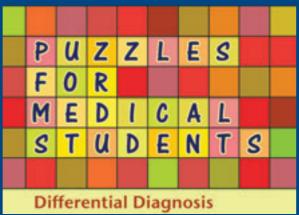


Object obscura: model operating theatre

This miniature hospital at scale 1:16 was made in 1932 for publicity purposes for the King Edward's Hospital Fund for London.

Medical Wordsearch: causes of acute pancreatitis

Find 12 causes of acute pancreatitis in the grid. Words can go horizontally, vertically and diagonally in all eight directions. See answers online at www.mddus.com. Go to the Notice Board page under News and Events.



Thanks to Scion Publishing Ltd and Ranjita Howard for permission to reproduce this puzzle from Puzzles for Medical Students (order online and enjoy 20% discount for MDDUS members; look for Scion logo and follow instructions on 'Discounts for Members' page at www.mddus.com)

S	D	1	0	D	_	т	c	R	т	W	٨	Ν	С	А
3	D	1	0	п		1	3	п	I	vv	А	IN	C	А
Q	S	W	С	С	W	Q	V	Т	Κ	U	S	J	V	Т
R	Ρ	С	С	Y	Q	W	Ν	М	Т	S	Е	V	Х	М
к	Т	F	Ι	Ζ	G	L	J	0	L	Е	Т	В	А	Е
D	F	D	R	Т	0	G	Ι	В	Υ	Ν	Ι	W	Т	А
W	W	F	J	Н	Е	М	J	Κ	G	0	В	Ν	Μ	D
S	Ν	Ζ	0	Ρ	М	R	Т	Т	Ρ	Т	Ν	Κ	R	Т
Н	U	С	С	U	Ν	Μ	U	G	Κ	S	0	J	Е	Р
G	L	R	Ν	Μ	V	U	Q	Ι	Y	L	Ι	J	Н	Т
А	Е	Е	G	Ζ	R	Μ	L	F	D	L	Ρ	L	Т	L
Ζ	Μ	V	G	Е	R	Ρ	Н	Ν	Т	А	R	R	0	R
Н	В	W	W	С	R	S	Т	Ζ	Т	G	0	R	Ρ	Е
М	Κ	Ν	W	Q	F	Υ	В	Х	Κ	Υ	С	G	Υ	Р
Y	R	L	L	М	V	Ν	Т	С	Т	М	S	R	Н	Y
Ν	J	R	Κ	Ν	Т	R	А	U	Μ	А	L	R	Ν	н

ADDENDA

Vignette: RCGP founder **Dr John Hunt (1905-1987)**

ON 13 OCTOBER, 1951, a letter from two GPs appeared in *The Lancet* with a then radical proposal. It read:

"There is a College of Physicians, a College of Surgeons, a College of Obstetricians and Gynaecologists, a College of Nursing, a College of Midwives, and a College of Veterinary Surgeons... but there is no college or academic body to represent primarily the interests of the largest group of medical personnel in this country – twenty thousand general practitioners".

Just over a year later on 19 November, 1952, The Royal College of General Practitioners was signed into existence in no small part due to the efforts of one of those two correspondents – Dr John Hunt.

John Henderson Hunt was born in 1905 in Secunderabad, India, his father an English surgeon in charge of the Nizam of Hyderabad's State Railways. Hunt moved to England with his mother at an early age. He attended Charterhouse School and here had his first major brush with the medical world when consigned to the infirmary with diphtheria. His tonsils were guillotined after being painted with cocaine and Hunt reckoned it must have been about the last time that this procedure was carried out in Great Britain. He later wrote: "I remember quite a bit of pain and a lot of blood about..."

At age 18 he achieved an Exhibition at Balliol College, Oxford, and graduated with a 2:1 honours in physiology (firsts were rare then), in addition to winning the Theodore Williams scholarship in physiology in 1926. In one of the long

breaks from university he took a 'vacation' with a friend, walking from Lands End to John O'Groats (despite having a deformed hip from childhood).

Hunt undertook his clinical training at St Bartholomew's Hospital Medical School and later earned a doctorate from Oxford for his work on Raynaud's syndrome. He passed his membership exam to the Royal College of Physicians of London in 1934.

Hunt had intended to seek a hospital career in general medicine and neurology and eventually landed a job as Chief Assistant to the Consultative Neurological Clinic at St Barts. But he grew disillusioned with his career choice and felt he had entered a "blind alley", according to his colleague John Horder.

"Diagnosis fascinated him, but it was not enough," Horder wrote. "In the neurology of 1935 effective treatments were few."

No doubt there were many reasons but it still came as a surprise when in 1937 Hunt chose to become a general practitioner. Friends and colleagues were aghast and called it professional suicide.

That year he joined Dr George Cregan in practice at 83 Sloane Street and later married Elisabeth Evill. In 1939 at the outbreak of war John joined the Royal Air Force as a neurologist. On discharge (as Wing Commander) in 1945 he set up an independent practice in Kensington with his own laboratory and X-ray department but chose not to enter the National Health Service (NHS) in 1948. His private practice thrived with a list of wealthy and devoted patients.

In the years following the war Hunt became convinced of the need for a college for general practitioners – to supervise their education and postgraduate training, to ensure high standards of practice and to "act as a repository for its traditions". In 1950 Hunt joined the Section of General Practice of the Royal Society of Medicine which, according to Horder, served as a

"seed bed" for many of the ideas later established in the College.

In 1951 he proposed the idea for a college in a memorandum submitted along with other interested GPs to the General Practice Review Committee of the BMA. The proposal was incorporated into letters, co-signed by Dr Fraser Rose, both to the *BMJ* and *The Lancet* (quoted above). It provoked much favourable comment but also opposition, particularly from the presidents of the established Royal Colleges who no doubt thought it would fragment the profession and dilute their influence.

Hunt persevered and helped form a steering committee to look into the practical aims and needs of the proposed institution, and on 19 November 1952 the Memorandum and Articles of Association were signed and the College of General Practitioners formally established. Over 2000 doctors joined in the first six months and Hunt played a central role in promoting the early organisation, serving as the first Honorary Secretary of Council and then President (1967-70).

Hunt's central role in the formation of the College was acknowledged in the first annual report which put on record "...the measure of success so far achieved by the College would not have been possible without him". Hunt enjoyed many honours as a result of his achievements. He was appointed CBE and in 1973 given a life peerage as Lord Hunt of Fawley.

He retired in 1981 due to failing eye sight and died in December 1987. Throughout his career he enjoyed the support of his wife Elisabeth, and among their five children (including a son who died in childhood) two would follow their father into general practice.

Sources

• Horder J, ed. The writings of John Hunt. London: RCGP 1992.

• RCGP Archives. John Hunt (1905-1987) Biography. Online. Available: www.rcgp.org.uk 17 Jun 2009.



MDDUS Practice Managers' Conference

Fairmont, St Andrews 25 – 26 February 2010

The FIFTH MDDUS Practice Managers' Conference is once again returning to the recently refurbished Fairmont, St Andrews (formerly known as St Andrews Bay Golf Resort & Spa) on 25–26 February 2010.

The full programme is currently being finalised but as delegate places are limited you can book **now** to secure your attendance and benefit from our recession busting rates – many of which are lower than our 2008 conference rates.

Book before 30th September to take advantage of the early bird offer.



Conference fees (all prices include VAT)

Residential single room	Early bird – DPS Early bird – non DPS Standard fee – DPS Standard fee – non DPS	£249 £279 £279 £299	Residential triple room	Early bird – DPS Early bird – non DPS Standard fee – DPS Standard fee – non DPS	£209 £229 £229 £239
Residential double room	Early bird – DPS Early bird – non DPS Standard fee – DPS Standard fee – non DPS	£219 £239 £239 £259	Day delegate	Early bird – DPS Early bird – non DPS Standard fee – DPS Standard fee – non DPS	£119 £139 £139 £149



To receive your early bird application form, email kwalsh@mddus.com or call Karen Walsh on 0845 270 2034