AUTUMN 2012 SUMMONS **AN (MDDUS PUBLICATION FOR MEMBERS**

• An inspector calls • Missed fractures • Dental decontamination •

Bring medicine to life...

This innovative series of books covers key topics in clinical medicine, each volume combining the advantages of a colour atlas with those of a short textbook, with clear and concise information for students, hospital doctors, general practitioners, and professionals allied to medicine. Text covers epidemiology, aetiology, pathogenesis, clinical presentation, differential diagnosis, investigations, prognosis and management.

- Text and illustrations integrated on double-page spreads
- Highest quality colour photos and diagrams
- Advantages of a colour atlas and a short textbook
- Ideal for study, revision and reference



Available from bookshops - visit www.mansonpublishing.com for sample content and more information



Dermatology, 2/e Rycroft et al, 978-1-84076-110-8, £24.95 Pediatric Neurology Bale et al, 978-1-84076-134-4, £39.95

Pediatric Clinical Ophthalmology Olitsky & Nelson, 978-1-84076-151-1, £39.95 Reed & Mason, ISBN 978-1-84076-157-3, £29.95

Mikuls etal, 978-1-84076-173-3, £29.95

Skin Diseases in the Elderly Evans & High, 978-1-84076-154-2, £29.95

Order online at www.mansonpublishing.com using the discount code MDDUSMANSON to receive the discount on the full range of medical titles from Manson Publishing

....with Manson colour handbooks

CONTENTS

<u>IN THIS ISSUE</u>

NOT long ago Dr Malcolm Campbell visited our Glasgow office to provide some details of his role as a primary care expert in clinical negligence. He is the subject of this month's MDDUS profile (page 14 of this issue) and offered some fascinating insights into the task of formulating a medical opinion in sometimes complex cases. Sadly there was not space enough to include all of the many interesting things Malcolm had to say.

One key question he did pose during our discussion was why one doctor gets sued and another does not for making the same error. In answer to this he offered an anecdote: "One of my patients came to see me last week clutching a bottle of champagne and a going-away card - as I'm just now easing out of my practice. This was a woman in whom I'd missed a pulmonary embolus. I had lots of good reasons for missing it. She had long-standing asthma and she was breathless and all

the rest of it. When she got out of hospital she came to see me and said 'you missed that one doctor'. And I said 'Yep, I did. Sorry'. And now years later she comes with a bottle of champagne and a card; someone else would have sued."

Malcolm speculates that it may simply be a matter of luck but there is a more likely explanation: "I think obviously if you have known a patient for a very long time and they believe that you do your best, then your chances of getting sued are lessened considerably than if it's someone you have never seen before. And I had known this girl since she was a baby."

Perhaps there is no better argument for valuing continuity of care. There is plenty more of interest in this rather practicalminded issue of Summons.

REGULARS

Notice Board

News Digest

performance!

A rare fever

Employment Law: What a

11 Q&A: Professor Gordon Dickson

20 Case studies: Caution sometimes

best, Only what's necessary,

organ transplant pioneer

22 Addenda: Articulated iron manneguin,

Waste not, want not, Crossword

and Vignette: Sir Michael Woodruff,

Ethics: Tweeting well

10 Profile: Dr Alistair Beattie

4

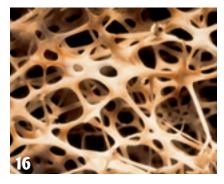
6

8

9

Jim Killgore, editor







Solicitor Laura Irvine offers guidance to doctors or dentists providing police statements

OPINION ON...

Latest in a series of profiles on professionals who work with MDDUS - Jim Killgore talks to Dr Malcolm Campbell who acts as medical expert in clinical negligence cases

CLINICAL RISK REDUCTION

() Mr Simon Bennet and Mr Michael Kelly highlight common pitfalls in the assessment and management of acute fractures

TAKING CONTROL

Editorial departments:

MEDICAL Dr Gail Gilmartin

Editor:

DENTAL

LEGAL

RISK

NES decontamination adviser Irene Black offers some tips to dental practices on how to keep in line with the latest guidance

Jim Killgore Associate editor: Joanne Curran

Mr Aubrey Craig

Simon Dinnick

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

MDDUS 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 • Fax: 0141 228 1208 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 viewpoints 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.



Cover image: The Orange Canoe by Tim Cockburn

Born 1955 in Sheffield, Tim Cockburn studied Painting at Edinburgh College of Art between 1974-78. Tim is inspired by his extensive travels in India and Sri Lanka: his main theme being the landscape which he paints in a bright, vivid palette. This work perfectly illustrates the smooth look of a typical screenprint where different coloured inks are pushed through a finely meshed screen onto the paper.

AUTUMN 2012

NOTICE BOARD

MDDUS purchases 1 Pemberton Row

MDDUS is pleased to announce that the Union has purchased the building housing our London offices at 1 Pemberton Row. The Union had been leasing space in the property and when the building was put



on the market we took the opportunity to purchase it. The decision to

purchase 1 Pemberton Row is in line with recent internal

discussion on the value of investing some of the funds we hold for members in property. Interest rates are very low at the moment and we felt that a better return might be achieved if some of the fund was in property. The purchase seemed an ideal opportunity not only to diversify our fund but also to own the building we currently occupy, saving on rental costs and providing us with space into which we might grow as time goes on.

A company called MDDUS Property Limited, which is a wholly owned subsidiary of MDDUS, has been created to deal with the ownership aspects of the building. In practical terms, little will change in the short term. We have retained a management company to maintain the building on behalf of MDDUS and the other six tenants.

Meanwhile at the MDDUS Glasgow headquarters, building and renovation work to expand our offices into the adjacent property at 167 Bath Street is now complete. The B-listed Georgian townhouse provides the Union much needed additional office space for staff as well as extra meeting rooms for consultations and to accommodate our growing educational programme offered by MDDUS Training and Consultancy services.

New online risk tool

MDDUS has launched the first module of a free interactive online risk resource designed specifically for GPs, practice managers and practice staff. The e-Learning Risk Resource will highlight some of the most common areas of



medico-legal risk in general practice and offer guidance and practical advice on achieving best practice. Each module will contain a series of multiple choice questions and scenarios designed to explore your knowledge of the topic, followed by more detailed explanations to illustrate each point.

The first module covers health records and data protection, including dealing with subject access requests and

principles of the Data Protection Act. It should take around 15 minutes to complete and can be accessed now. Just go to the Training and Consultancy page

on www.mddus.com and click on e-Learning Risk Resource.

The next module on Consent will be available in October.

Membership milestone

MDDUS marked a significant



milestone in the financial year 2011 when our total membership for the first time exceeded 30,000. This is just one of the highlights of the *Annual Report and Accounts* 2011 which was

formally adopted by the Union at its AGM in September.

Active membership grew by 5.8 per cent in 2011 with much of that growth among GPs practising outside of Scotland, showing a 10.4 per cent growth over the 2010 figures. Our total number of GPs across the UK now exceeds 10,000.

Growth in membership predictably leads to greater demands on service. In 2011 our medical advisory service dealt with over 10,000 individual member contacts including telephone calls, emails and letters – up 5.3 per cent over 2010 and 36 per cent higher than five years ago. This growth can also be attributed to an increasing awareness among members that seeking advice at an early stage can often help prevent matters escalating into formal complaints and claims.

Our membership department was also kept busy in 2011 handling well over 20,000 contacts from members either by phone, email or post. In the first six months of 2012 the team fielded 6,275 calls with an average response time of 7.6 seconds.

Access the *MDDUS Annual Report and Accounts 2011* at www.tinyurl. com/8syy4rx

GMC or GDC letter – don't act alone

IF there is one thing that is likely to raise stress levels for doctors and dentists, it is the arrival of an official letter from the GMC or GDC.

There are various reasons why a regulator might get in touch, but the one most likely to cause anxiety is notification that a complaint has been made against you. Allegations may have been made

IN BRIEF

• MDDUS AT 2012 RCGP CONFERENCE MDDUS is proud to have been principal sponsor of the 2012 RCGP Annual National Conference. The event was held on October 3-6 at the SECC in Glasgow and the theme for this year was Global General Practice. The conference showcased the latest clinical and policy developments across the UK and brought together an impressive range of national and international speakers. MDDUS hosted two sessions during the event and our conference stand was well attended by existing and prospective members. • ASSESSING FRACTURE RISK IN ADULTS NICE has published guidance to help clinicians assess patients who might be at risk of a fragility fracture and identify those likely to benefit from preventative treatment. Each year in the UK over 300,000 people are seen in hospital because of fragility fractures, with the most common

PERSPECTIVE



By Dr Ivor Felstein, Retired Consultant Geriatrician

Scotching the notion

MY SCOTTISH paternal grandfather was (for me at any rate) a fascinating old man. He was born in pre-Soviet Russia where the Tsar (and Tsarina) ran a dictatorial and aggressive personal war against so-called "immigrants", as well as the Russian revolutionaries who sought to overthrow his unelected governance.

When he was still a child, Grandpa was taken by his older sister aboard a ship which she thought was bound for North America. In fact, the two of them eventually arrived in the Scottish port of Glasgow, where luckily for them a distant cousin working temporarily at the port recognised their names on the ship's manifest and looked out for their arrival.

From the port, Grandpa and his sister were driven away in a horse-drawn cart to a high-rise tenement in the Gorbals. Here they were eagerly accepted as new arrivals in a flat belonging to Grandpa's older cousin, a self-taught tailor.

My earliest memory of my Grandpa was when, still as a boy, I was taken by my Dad to visit him at his detached cottage where he had retired from his trade as a cap maker. On arrival, Grandpa waved us into the backdoor of the cottage and through into his living room. Here we all sat down, awaiting a cup of tea and some biscuits, while Grandpa poured himself a tot of Scotch whisky. This he drank slowly, while telling us in his native tongue that it was 'geshmak' (meaning tasty and pleasant).

I was very surprised when he poured a further, if very much smaller amount, into another glass and offered this tot to me! I was aware enough that this was alcohol, but my only prior experience had been the sips of wine permitted by my parents at festive religious occasions.

I looked to my father and he nodded that it was all right to indulge Grandpa's whisky "gift". Instead of testing it with a sip, I copied Grandpa and gulped down the lot. The sensation was extraordinary (I found out much later this was a Highland malt whisky from Aberfeldy in Perthshire). It had a lovely all-round flavour with a lightly peaty element, or as the whisky experts describe it, a "peaty nose". I felt the warmth inwardly and gave Grandpa a big smile.

He smiled widely too and said: "Really good, eh Laddie, now you *are* my wee man..." Lest you get the wrong impression of my Grandpa, the next time I went to see him some weeks later I was given fizzy lemonade.

The entire scenario came back to

me recently when I was reading a local newspaper. An article hinted that the best whiskies have not only an entertaining and relaxing element. They also may have a positive effect on human organs, providing a 'useful stimulus' as the imbiber grows older. Only in one sense might I agree: they invariably encourage micturition.

Other so-called health benefits are not, in my view, totally proved thus far. The article failed to mention that alcohol intake in regular excess (more than 14 units per week in women and more than 21 units per week in men) can in time, produce hepatic disease and peripheral nerve damage, not to mention pancreatic disease. It can even, allegedly, encourage osteoporosis in some women.

Speaking at pre-retirement courses now years on I attempt to explain the reason behind this six-unit gender gap, stressing how all alcohol is inevitably passed through the liver and – over a given lifetime – the female liver is less able to deal with excessive amounts than the male liver. Some men, I am told, armed with this knowledge at the pub or even at home have been known to omit a drink or two for the ladies "on health grounds". I call that ungenerous and ungentlemanly.

Did someone say "Cheers"?

about your professional conduct or clinical competency and the GMC or GDC may invite you to respond to these allegations.

In these circumstances, doctors and dentists should not be tempted to formulate a response on their own. You should contact an MDDUS adviser without delay as timescales can be tight. Correspondence at such an early stage in the complaints process may not seem significant, but it is important to remember that anything you write or say to the GMC or GDC may ultimately end up before a fitness to practise panel or investigating committee.

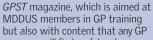
Contacting MDDUS will allow a medico- or dento-legal adviser to offer appropriate legal advice from the start about how to reply. In some cases, it may even be necessary for MDDUS to instruct a solicitor to draft a response on a member's behalf. A trawl through MDDUS

files highlights numerous instances where members have not taken advice on how to respond to the GMC or GDC and their response has gone on to have a negative impact on their case. So don't act alone.

sites for these fractures being the spinal vertebrae, hip and wrist. Osteoporosis: assessing the risk of fragility fracture is available at www.nice.org.uk/CG146

• LATEST ISSUE OF GPST Check out the latest edition of





will find useful and interesting. This issue features a fascinating profile of prison GP Dr Iain Brew, a look at new GMC guidance on child protection and advice on working as a GPwSI in diabetes. To access previous issues go to Publications at www.mddus.com. • WRITE FOR SUMMONS The publications team at MDDUS is always happy to use contributions from members. So if you have an idea for an article or a personal perspective please email **jkillgore@mddus. com** or phone on 0845 270 2038. Check out all our print publications at **www.mddus.com**



Non-engagement not an option in GMC revalidation

DOCTORS not engaging with the GMC revalidation process could lose their licence to practise, according to new published guidance to help responsible officers make revalidation recommendations about registrants.

Revalidation is expected to begin later this year and the new guidance explains what responsible officers should take into account when deciding what their recommendation should be. Responsible officers have the ability to make three types of recommendation in regard to a doctor's revalidation: a positive recommendation, a request for an individual's revalidation date to be deferred (e.g. if more time is needed to collect supporting information) and a notification of "non-engagement".

The guidance document states that: "A notification of non-engagement can potentially result in the GMC withdrawing a doctor's licence to practise, through the existing processes for administrative removal."

But the protocol adds: "Notifications of non-engagement are not a mechanism through which concerns about doctors' fitness to practise can be raised with the GMC."

It advises responsible officers who become aware of concerns about a doctor's fitness to practise at any point in the revalidation to pursue this through the existing GMC processes for raising concerns.

The guidance follows publication of a recent report showing that more than 80 per cent of doctors in England are now linked to organisations that can support them with revalidation. The process should start for licensed doctors from April 2013 onwards.

Cosmetic surgery review includes dentistry

TREATMENTS such as tooth whitening, Botox and dermal fillers have been included in a major Government review on cosmetic surgery.

The Department of Health has launched the broad ranging review in the wake of the PIP breast implant scandal and it could result in tighter regulations of the cosmetic surgery industry including procedures routinely carried out in dental practices.

The Government is asking for views on the regulation and safety of products used in cosmetic interventions and how best to ensure that practitioners have the necessary skills and qualifications, and organisations have systems in place to look after patients both during and after treatment. It will also consider how to make certain that people considering cosmetic surgery and procedures are given the information, advice and time for

> reflection needed to make an informed choice, and what improvements are necessary to adequately deal with complaints. Both the BDA and the GDC are expected to submit responses.

NHS Medical Director Professor Sir Bruce Keogh, who is leading the review, said: "The recent problems with PIP breast implants have shone a light on the cosmetic surgery industry. Many questions have been raised, particularly around the regulation of clinics, whether all practitioners are adequately qualified, how well people are advised when money is changing hands, aggressive marketing techniques, and what protection is available when things go wrong."

A team of experts will assist Sir Bruce to gather evidence and make recommendations to the Government by next March. Access the review at **www. tinyurl.com/9j7b7xK**

GMC issues child protection guidance

NEW guidance to help doctors protect children from abuse has been issued by the GMC.

Protecting children and young people: the responsibilities of all doctors is aimed at supporting clinicians dealing with a wide range of complex child protection issues. The guidance makes clear the responsibilities of

doctors in this area and advises where they can turn for support.

Niall Dickson, Chief Executive of the GMC, said: "Child protection is a complex and emotionally challenging area of practice for any professional, and doctors in particular can find themselves having to make difficult and delicate judgements in a charged atmosphere. The decisions made or not made as a result can have far reaching consequences.

"We are clear though that doctors must raise their concerns if they believe a child or young person may be at risk of abuse or neglect - and this applies whether or not the child is their patient. They also need to

IN BRIEF

• COMPLAINTS RISE AGAINST DOCTORS Complaints about doctors have hit a record high, according to a report from the General Medical Council. The number of complaints increased by 23 per cent in a year, rising from 7,153 in 2010 to 8,781 in 2011. It continues a trend that has been rising since 2007. Despite the figures, the GMC said this does not mean medical standards are falling. The second annual *State of Medical Education and Practice in* *the UK* (SoMEP) report is available on the GMC website. •"SURGEON" FOR SURGEONS

ONLY The Royal College of

Surgeons is calling for the job title of "surgeon" to be restricted to doctors with medical degrees and recognised surgical qualifications. An RCS England survey found that 92 per cent of the public agreed that use of the word "surgeon" in a job title should be restricted by law. The study reflects concern that some healthcare providers use



Protecting children and young people The repossibilities of all doctors

NEWS DIGEST

know who to contact for advice if they do have any concerns."

The guidance has been developed following concerns that some recent high-profile cases were deterring some doctors both from working in this area and from raising child protection concerns.

It states: "It is vital that all doctors have the confidence to act if they believe that a child or young person may be being abused or neglected.

"Taking action will be justified, even if it turns out that the child or young person is not at risk of, or suffering, abuse or neglect, as long as the concerns are honestly held and reasonable, and the doctor takes action through appropriate channels."

Access the guidance at www.tinyurl. com/86e3b5z

O Dental patients advised to query indemnity

DENTAL patients are being encouraged to ask their dentist if they have indemnity or insurance cover in a new factsheet produced by the General Dental Council.

The regulator is urging patients to "know their rights" when it comes to pursuing a complaint and getting their money back "if something goes wrong". It

explains how indemnity or insurance cover

is a way for dental professionals to ensure

patients have a way to claim compensation

The factsheet states: "Our advice to patients is that you ask your dentist or dental care professional if they are properly insured, or indemnified for the treatment they are carrying out. Our research shows that the vast majority will have measures in place."

It goes on to advise patients how to make a complaint and to contact the GDC "if you think the dental professional treating you is a risk to other patients".

MDDUS head of dental division Aubrey Craig has welcomed patients being given more information about what to expect from their dentist and believes it is further evidence that dentists should be suitably protected and prepared.

He said: "Dentists should ensure they are fully compliant so they can meet their patients' expectations and needs as well as looking after themselves.

"All dentists should have access to indemnity through their dental defence organisation so they are protected in the event of a claim of clinical negligence."

• Warning against overreliance on methadone

HEROIN addicts should not be "parked indefinitely" on substitute drugs, such as methadone, according to a new report



An estimated 150,000 (out of 265,000) heroin addicts in England are currently being treated using substitute medications, typically methadone or buprenorphine. The

report calls for action to ensure that opioid substitution therapy (OST) is always delivered in line with clinical guidance. Compelling scientific evidence shows



that OST can be effective but the report cites a culture of commissioning and practice that does not give sufficient priority to the desire of individuals to overcome their dependence on drugs.

The expert group rejected imposing time-limits on treatment, warning that arbitrarily curtailing or limiting the use of substitute medication would prevent addicts from sustaining their recovery.

But the group advised doctors and health professionals working with heroin addicts to review all existing patients to ensure they are striving to achieve abstinence from problem drugs and ensure treatment programmes are dynamic and support recovery, with the exit visible to patients from the moment they walk through the door.

Professor John Strang, who chaired the group, said: "Overcoming heroin addiction is often very difficult, but with the right support, more people can and will recover from dependence. Substitute prescribing has an important contribution to make to recovery-orientated drug treatment, but it is not an end in itself. More needs to be done by all of us in the health profession to ensure that users are signposted, supported and encouraged to overcome dependence whenever possible, and to reintegrate into society."

Access the report at www.tinyurl. com/9fhx5ml

the title surgeon without holding surgical qualifications. BAN ON REMOTE BOTOX PRESCRIBING Doctors will no longer be allowed to remotely prescribe Botox under new guidelines from the GMC. The ban applies to all injectable cosmetics and means that patients seeking such treatments will have to arrange face-to-face consultations with their doctor. The guidance is to ensure doctors understand the patient's medical history and reasons for wanting treatment. • NHS NEGLIGENCE PAYOUTS HIT RECORD HIGH The cost of NHS litigation claims hit a record £1.3billion this year, according to new figures. Payouts for clinical and non-clinical claims in 2011-2012 increased by 46 per cent from last year's bill of £911million. Compensation for patients harmed due to clinical negligence totalled £1.28billion with the remaining sum related to other civil claims.



in such cases.

EMPLOYMENT LAW



WHAT A PERFORMANCE!

Ian Watson

Ensure that staff are crystal clear about what is expected of them at work

AS BUDGETS are squeezed, resources harder to come by and even greater efforts are expected of staff in the current climate, medical and dental practices are becoming increasingly conscious that managing performance is not some optional extra but an essential ingredient of staff management if we are to remain competitive (and open!).

But the archives of Law At Work's advice calls are littered with desperate cries for help from exasperated managers who have lost patience with staff who just don't seem to have got the message that a fair day's work is required in return for that fair day's pay.

Our usual question to callers is: "What efforts have you made to ensure that staff are crystal clear about exactly what is expected of them and do you draw the inadequacies of individual poor performers to their attention in a formal manner? Basically, are these staff aware of the consequences for their continuing failure to meet the standards of performance expected of them?"

We are often greeted by the response: "Of course they know what's expected of them. We keep telling them they are not performing well. They just don't get the message!"

What often emerges on investigation is a murky history of conversations (largely unrecorded) about the work not getting done and of excuses being made by the staff member for not being able to do it. The discussion may have been triggered by a customer or colleague complaint or the manager taking over uncompleted tasks – just to get them completed – or correcting errors themselves.

This clearly falls short of what is effective, good practice, motivational and legal from a management point of view. Many staff will respond well to clarity regarding what they are required to do (and to what standard) and to an approach which engages them in a discussion to identify the barriers to good performance and explains how these can be overcome.

It is a myth, in our experience, that staff just want to be left alone to get on with things – especially if they suspect that their manager is going to descend on them at some point to criticise their output or quality of work.

If, as an employee, I have been told what 'success' looks like and that I will be held to that expectation I can judge reasonably well what I have to do to achieve that – and, frankly, I am going to shout if there are things stopping me from doing so. If I can't be bothered and know that I will be picked up for falling short of my targets then I will hardly be surprised if (eventually) I'd be putting my job at risk.

All this presupposes a degree of formality on the part of the organisation in describing job duties and responsibilities, defining job-related objectives in a precise, quantifiable and time-bound manner and reviewing progress on a regular, formal basis.

Relying on some single, annual appraisal discussion, in isolation, will provide a check on performance progress but is hardly effective in tackling performance problems that arise during the operational year. It will amount to too little, too late. It is, of course, possible that a particular individual employee may be determined to avoid their responsibilities and decide to try to get away with performing as little as possible. In doing so, they are ultimately putting their job at risk. But their manager risks snatching defeat from the jaws of victory by trying to deal with the recalcitrant employee informally for as long as possible – then jumping on them like a ton of bricks when they lose patience with them.

This is almost certainly likely to be both ineffective and legally risky for the organisation. What is required is a move to formal warnings about poor performance, at an appropriate point in a particular case, with the individual under no illusions about exactly what they need to do in terms of improvements in performance (with objectives and timescales) to meet the required standards.

If the individual fails to respond to this formal warning process then they will justifiably face another formal review, potentially another (higher-level) warning and, eventually, dismissal with notice.

The good news is that in most cases our clients find that (with our guidance at each step of the way) the employee responds positively to this process and a dismissal is unnecessary. The even better news for them is that if a dismissal ends up being challenged in an employment tribunal as unfair, the employer's defence is straightforward and well documented.

The answer for employers is don't lose patience. Treat staff with maturity and as much formality as necessary and most will respond positively to your management and remain motivated to deliver the level of performance you expect.

■ Ian Watson is training services manager at 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**

An ethical perspective on social media

TWEETING WFII

Deborah Bowman

I AM a keen user of social media. I access my Facebook and Twitter accounts daily, read, and occasionally, comment on favourite blogs and maintain my Academia. edu profile. Social media allows me to connect with, and learn from, a wide range of people across the world. I stay in touch with colleagues who have moved countries and share thoughts, guestions and ideas with a global community of collaborators.

Social media does, however, carry risks for the unwary. The BMA has issued guidance for doctors and medical students on the practical and ethical aspects of using social media. Professional boundaries, confidentiality and the reputation of individuals and the professions at large are areas of particular vulnerability when using social media. If you have not read that guidance, I commend it to you. Yet, as with all general guidance, it is in the detail of its application to daily experience that the ethical realities are revealed.

Several recent experiences have reminded me again of the power and potential difficulties of social media. This month I have observed several clinical colleagues disagreeing on Twitter. The contents of their exchanges were open to all and made for interesting reading. However, at some point the interaction ceased to be a constructive expression of difference in opinion and assumed a personal tone. Such is the nature of social media that the moment at which this occurred and the reasons for the change were imperceptible.

Nonetheless, the communication made me increasingly uncomfortable. Healthy debate yielded to unedifying questions about credentials and opaque references to rumour.

Many readers will know that disagreements in a working context are neither rare nor always handled with professionalism. However, unlike on Twitter, most work-based conflicts take



place within a limited setting and are not open to anyone interested in observing. What's more, the capacity for contextualising and containing disagreement in person is considerably greater than the 140 characters allowed for by Twitter.

The second experience that has given me pause for ethical thought concerns messages sent by members of the public to clinicians. Now, the vast majority of practitioners on Twitter neither discuss nor advise on clinical issues. Clearly to do so would be unethical. However, when clinicians discuss a topic on Twitter that has particular resonance for an individual, he or she will often make a comment, ask a

"Healthy debate yielded to unedifying guestions about credentials and opaque references to rumour."

question or contribute to the discussion. As with professional differences of opinion, a healthy exchange can guickly degenerate into a terse, polarised stasis. And perhaps the stakes are higher given the disparity in expertise, experience and perspective. Neither party intends it to be so, but both the limiting and limited nature of the format can transform the constructive exchange into a damaging one swiftly and irrevocably.

Finally, there is a minority on Twitter who seem intent on provoking and insulting other users: the so-called 'trolls'. I was astonished when, after participating in a

radio programme on people with learning disabilities, I received a stream of messages from strangers making unrepeatable and repugnant statements about both the programme and me. I pondered what to do. I wanted to engage, to reason and to discuss. I quickly learned that was not an effective strategy and turned to the 'blocking' facility. However, every day on social media, people's passion for a subject and willingness to engage in debate even with those whose language is intemperate and hostile, end in ill-judged and unedifying ripostes by the frustrated and exasperated.

So, what are the principles for ethical engagement on social media?

First, think about the balance between the personal and professional. It is a judgement how much you choose to disclose on social media sites and it is likely that you will share information differently depending which site you are using. Be aware of your audience: both seen and unseen. For example, you may have a list of your followers on Twitter but not know who views your profile and tweets. You can and should adapt your communication according to your audience (and you can use your privacy settings to help you do so) just as you would in any other area of your life.

Secondly, be authentic, be constructive, be forgiving and be kind. It sounds simple but it is difficult to remain calm and professional when you receive a thoughtless or even insulting

message via social media. You don't have to engage with anyone: you are in control. But, if you do respond, professional communication is required, even if you do only have 140 characters.

As social media becomes more integrated into our lives, it is likely that the ethical challenges of its use will evolve and there will be much to discuss. Perhaps you could share your experiences? I'd love to see you in my timeline (@deborahbowman)!

Deborah Bowman is Professor of Bioethics, Clinical Ethics and Medical Law at St George's, University of London

MDDUS chairman Dr Alistair Beattie *has stepped down after three decades of loyal service. He tells Summons of the changes he has seen and his thoughts on the future of medico-legal practice*



PARTING WORDS AFTER 30 YEARS' SERVICE

OVER the course of 30 years' service to MDDUS, one of the most important skills Dr Alistair Beattie has learned is how to adapt and change with the times.

The Union was a very different place when Dr Beattie first took up a position on the board in 1981 at the tender age of 39. Then, he worked as a consultant physician and gastroenterologist at the Southern General Hospital in Glasgow and was a

"member of council" at MDDUS before becoming treasurer in 1985, assuming the additional role of vice chairman in 1996. In 2002, having retired from full-time

medical practice, he was elected MDDUS board chairman and remained in that post until stepping down in September aged 70.

When Dr Beattie first joined the MDDUS board, the Union occupied a small fifth floor office and employed only a handful of medical and dental advisers. The caseload was much lower then and it was the responsibility of the board members to decide which cases would be settled and which defended. In contrast, the Union today has offices in Glasgow and London with a greatly increased team of medical and dental advisers, as well as its own in-house legal team and employment law advice service.

Dr Beattie recalls: "The Union is very different now. When I first started all board members were doctors and dentists and the average age must have been around 80. Since then, that average age has come down considerably and it's made the board a lot livelier.

"We now also have board members from outside the medical and dental professions which has introduced a valuable, broader range of skills. Our discussions now are largely businessrelated rather than focusing on clinical cases. I have had to learn quite a bit about corporate governance which is a challenge I have relished, and board members also now work in consultation with our team of actuaries and experts who advise on areas such as investments."

The volume of cases handled by MDDUS has risen enormously in the past 30 years, which Dr Beattie believes is partly due to society becoming increasingly litigious. He also attributes the rise to advances in medical technology which have naturally increased patient expectations.

He says: "So much more can be done nowadays to treat illness or disease that could not be done in the past, for example the development of coronary angiography and bypass. Patients expect much more from their doctor or dentist which makes complaints more likely. Combine this with

"The features that make MDDUS strong have remained constant... these include ease of contact between member and adviser."

> the rising number of 'no win no fee' firms and that increases the likelihood of litigation further."

Despite the trend towards increasingly aggressive litigation and complaints against healthcare professionals, Dr Beattie remains optimistic about the future.

"At the core it will always be a relationship between a patient and a doctor or dentist and in the vast majority of cases that's a relationship of mutual respect and a desire to help," he says.

One thing that hasn't changed during Dr

Beattie's tenure is the Union's commitment to providing a top quality service to members.

"The features that make MDDUS strong have remained constant," he says. "For me, these include the ease of contact between member and adviser, the discretionary powers that allow the necessary flexibility to support members with a wide range of issues, our cautious and sensible approach to financial management and, of course, the excellent staff."

Many at MDDUS would agree that Dr Beattie's own input over the years has helped to greatly strengthen the Union. Chief executive Professor Gordon Dickson pays tribute to Dr Beattie's invaluable years of service.

He says: "Alistair has been a member of this Union all his professional life and has served it in a number of capacities as director, treasurer and chairman for well over 30 years.

"Length of service is only one measure of a person's contribution. The other is the nature of that service. Alistair has brought integrity, humour and good old fashioned common sense to the roles he has discharged. The Union is the stronger for his involvement and I will personally miss him greatly as a colleague."

Dr Beattie is now looking forward to a slightly less demanding schedule that includes working with the Medical Council on Alcohol and fulfilling his role as

> chairman of the charity TENOVUS, which raises funds for medical research. He also expects to fit in a few more games of golf and spend more time with

his wife (and fellow retired doctor) Gillian, his five children and eight grandchildren.

Dr Beattie says: "I have thoroughly enjoyed it over the years, especially the contact with all the people I have met and the wonderful MDDUS staff. It's been a challenge to keep pace with all the changes that have come in over the past 30 years but it's been a privilege and life has certainly never been dull."

Profile by Joanne Curran, associate editor at MDDUS

A CUNNING PLAN

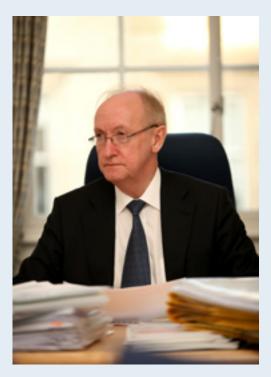
Summons speaks to MDDUS CEO Professor Gordon Dickson on the value of strategic planning – especially now

NO organisation can afford to stand still – this simple ethos underlies strategic planning at MDDUS. The Union is now in the fourth year of a six-year plan with the stated aim to "ensure that we know where we want to be and how we intend to get there". What does strategic planning mean for an organisation like MDDUS and why is it considered so vital to corporate health? We asked CEO Professor Gordon Dickson for his perspective.

Why does MDDUS need a strategic plan?

There is a lot written and spoken about strategy and planning. It features as a major topic in MBA courses and fills the pages of many management text books. However, for us here at MDDUS it is not about theory but about hard reality. I once read somewhere, I think it is an old Chinese proverb, that learning is like rowing upstream, not to advance is to fall back. It is exactly the same in business. The world in which the Union exists is constantly changing. It is not just the turbulent financial and economic times that seem to be in a constant state of flux but it is also the legal and regulatory environment in which we work, the structure of the medical and dental landscape, the emergence of new providers of indemnity, increasing competition from other organisations and so much more. Not to advance in the face of this will certainly result in the Union falling behind.

At MDDUS planning is about deciding where we want to be and how we want to



get there. We don't want to be wafted about by the winds of change and neither do we want to spend our whole time simply reacting to what is happening or to what others are doing. For us, planning is really a positive statement of who we want to be.

What are the main elements of the plan?

Picking up on the last part of my previous answer, if planning is about who we want to be then it must be structured to reflect that clearly. The senior management team and Board had a great deal of discussion about how to structure the plan. Very early on we decided that slogans or mission statements were not for us. That goes back to the point about reality. Words are relatively easy to coin but what we were interested in was a clear definition of what we wanted to achieve. We built our plan around three simple aspirations: one about our place in the market in terms of presence, influence and size; one about providing a high quality service and another about offering products and services that were highly valued by our members. It is these aspirations that define where we want to be in 2015.

Aspirations like these are a bit like "motherhood and apple pie". The real work in building the plan was to establish measurable goals that would enable us to assess whether or not we had in fact achieved the aspirations. These goals are quite specific and couched in terms of 2015. The final piece of the planning framework was to decide what we actually did each year to try to deliver the 2015 goals and so specific objectives are set each year.

How do you measure the success of the plan?

Success is measured in terms of whether or not we meet the objectives we set for each year. It is the aggregation of these annual objectives that will help us attain the position to which we aspire.

Because we were keen to ensure the objectives we set were actually measurable, the task is not too hard. It does put a bit of pressure on staff as there is no "hiding place" if we have set an objective that is clearly measurable.

Most of the key indicators are pulled together in what is known as a Balanced Scorecard. This is intended to represent a balanced picture of progress that is being made. I suppose it is a bit like measuring a patient's vital signs. It would be unwise to look at one measure alone.

What has the plan helped achieve so far?

We are very pleased with the progress we have made on all our plan goals. I suppose members do not really see the detail of the plan and arguably are not too interested in it. Recent survey work carried out for the Union has shown once again that the prime factors members considered to be important are price, immediate access to expert advice and the financial security of the organisation. Our members enjoy a highly competitive price, receive a high quality service when they need it and can see from the MDDUS Annual Report and Accounts the real financial health of the Union. What they don't necessarily see is the work that goes into ensuring these three things are delivered, the background work, much of which is derived from effective strategic planning.

■ Interview by Jim Killgore, editor of Summons

An inspector calls

OLICE

Laura Irvine of bto solicitors offers some useful guidance should you be contacted by police to provide a statement, or to be interviewed under caution

EW people relish the thought of being contacted by the police for anything – let alone to be interviewed as a witness, or worse a suspect. Doctors and dentists are no different. The police may contact you seeking information for any number of reasons – a coroner's inquest (England and Wales), a fatal accident inquiry (Scotland) or in relation to a criminal matter. Knowing what to expect and having adequate legal support can help ensure you do not say or do anything you might later regret.

Witness statements

Providing a statement to the police as a witness should be a relatively straightforward process. In England and Wales the police may ask you to provide your own written statement which can then be used as evidence in court. However, they may request to come and take a statement from you. In Scotland this is the most common approach. Scottish courts place less reliance on written evidence than in England and Wales, preferring evidence to be given orally, and so you are more likely to be required to attend court to give evidence.

In Scotland, it is your recollection at the time of the court appearance that the court will be most interested in, and not what you said in your original statement. However your statement can be used to remind you about what you said nearer the time, or to challenge your evidence if you say something different in court.

The police will note your statement and normally ask you to sign it to ensure that it is accurate. It is important to make sure your statement has been noted accurately and that you are happy with it before you sign it. You are unlikely to be given a copy of your statement when it is taken. In England and Wales you may be supplied with a copy before having to attend court but in Scotland this is unlikely.

If you do have to give evidence then you may be asked to look at any relevant medical records in court. It could be some time since you dealt with the case and most people find giving evidence in court a daunting experience and one they wish to get through as quickly as possible. However, try to take your time and refresh your memory from the medical records. You may wish to contact the party who cited you to attend court, the prosecutor or the coroner, to ask to see any relevant medical records before you attend court, as it is important that your evidence is as accurate as possible.

The police will often also ask you to hand over medical records as part of their investigation, and advice should be sought from the MDDUS if you feel at all uncomfortable about providing such information. You have competing data protection and confidentiality issues to consider and if you are at all concerned that you may be providing information that perhaps you should not, seek advice and assistance from the MDDUS.

Being interviewed as a suspect

Since the introduction of the Police and Criminal Evidence Act 1984, anyone suspected of having committed a criminal offence in England and Wales is entitled to speak to a solicitor before they are interviewed. The law in Scotland has recently changed to allow this right. Whilst a suspect can waive this right (and the police will often seek to persuade a suspect to do so), we would urge anyone in that situation to demand access to a solicitor before being interviewed under caution. A solicitor can offer you important advice on decisions such as whether or not to exercise your right to silence (see below).

In England and Wales the police can arrest an individual if they have a warrant or if that person is about to or in the act of committing an offence, or if there are reasonable grounds for

suspecting the same. Indeed, anyone who is reasonably suspected to have committed an offence can be arrested without warrant. In such circumstances you may be taken to a police station but you should not be asked

any questions until you have had the opportunity to seek legal advice. The right to seek advice from a solicitor can be exercised at any point during the time a suspect is detained, even if they have indicated earlier they do not want legal advice

The police can hold a suspect for up to 24 hours without charge, unless permission is given at a high level or by a court that the suspect can be held for longer.

By contrast, in Scotland, the police do not arrest but detain a suspect for up to 12 hours (and up to 24 hours, if permission is granted by a senior police officer), the practical result being the same, i.e. being held by the police at a police station. During this time a suspect can be interviewed with the right to consult with a solicitor in private before being interviewed. A consultation can also take place in private at any time during the interview as is necessary, if the suspect wishes further advice.

The police can also ask a suspect to attend voluntarily (as opposed to being arrested or detained) to be interviewed under caution. In these circumstances the suspect still has the right to access advice from a solicitor and to have one present when they are interviewed. An important distinction between being detained and attending voluntarily is that with the latter the suspect is free to leave at any time.

Whilst a voluntary interview may sound less threatening, there exists the same possibility of self incrimination in relation to anything said at interview. Even if the suspect is told there is "nothing to worry about", access to a solicitor should always be sought no matter what the police might say.

Right to silence

"A voluntary interview may sound

less threatening but there exists

the same possibility of self

incrimination."

In deciding whether to make any comment at interview, it is important to realise that in England and Wales adverse inference can be drawn from the exercise by a suspect of the right to silence. It is important for any solicitor acting on your behalf to give you advice on how best to handle any questioning. Sometimes the police will provide the solicitor with some information prior to the interview, which can assist in providing the suspect with advice on how to handle the interview process and what, if anything, to say in reply to questioning.

In Scotland the right to silence is the same, but no adverse inference can be drawn from its exercise; thus in some circumstances remaining silent might be advisable. Each case will turn on its own facts and circumstances

> and advice should be sought on each occasion as to whether silence ought to be maintained.

> No matter where you are in the UK it is clear that if approached by the police, either as a witness or as a suspect, legal advice should be sought, not only in

relation to the criminal investigation but so as to keep you right when dealing with the GMC or GDC too, who may well subsequently carry out their own investigations.

Should you find yourself subject to investigation by the police as a witness or suspect you should make contact with the MDDUS. The Union offer members access to legal representation in situations related to clinical conduct but not normally if the conduct under investigation is personal. However, MDDUS advisers can put you in contact with a solicitor, experienced in both criminal and GMC/GDC matters, who can represent your interests privately in relation to the police investigation.

Laura Irvine is a solicitor at bto



Opinion On...

Continuing a series of profiles on professionals working with MDDUS, Jim Killgore speaks with Dr Malcolm Campbell who provides expert medical opinions in clinical negligence cases

N 2011 MDDUS logged over 500 new claims of negligence against members. Certainly few things can make a clinician's heart sink more than receiving a letter of claim from solicitors acting on behalf of a patient – even if such a letter has been expected.

A phone call to an MDDUS adviser will do much to ease any panic – and this is often the first step in a sometimes long process to establish the most reasonable outcome for all parties involved in a case. The MDDUS adviser will usually ask for a copy of the letter and an initial response from the member in answer to the allegations. In order to weigh up the best approach going forward the adviser or an MDDUS lawyer will then often commission a report or reports from external clinical experts.

One of the UK's most experienced medico-legal experts when it comes to general practice is Dr Malcolm Campbell. I chatted with him recently one afternoon at the MDDUS offices in Glasgow, just a short walk from the Department of General Practice at the University of Glasgow where Malcolm acts as a senior clinical lecturer.

Malcolm has been doing medico-legal work for over 15 years, mainly for the GMC as a lead performance assessor in fitness to practise investigations but he also provides expert reports in civil cases. In addition he remains a GP partner at the same practice in Kirkintilloch near Glasgow where he started his career in 1975.

When I ask Malcolm why he writes medico-legal reports on top of what seems an already impossibly busy professional life, his reply is surprising: "To be honest, I don't do it because I want to save humanity or because I feel sorry for doctors who get sued. I feel just as sorry for patients who get badly treated. It's really because I find it incredibly interesting."

Part of the interest and challenge that comes with generating clinical opinions in medical negligence cases is the analytical skill needed to get at the truth in a sometimes tangled and contradictory narrative.

"It requires a certain turn of mind," says Malcolm. "A desire to get to the bottom of things, Hercule Poirot type stuff almost. Looking at what happened, developing a story, and then coming to a conclusion and being right. And if you are not right at least you learn something."

No page unturned

Malcolm's job begins with the receipt of an often thick bundle of paper (or the electronic equivalent) including details of the allegation from claimant solicitors, a copy of the GP's response, the patient records, both primary and secondary care, and any other relevant legal documents or previously commissioned expert reports.

"You get all this material and then you sit down and read it – every single page," says Malcolm. "There are usually bits of information all over the place. You have the GP notes, what the doctor says, what the plaintiff says, and you try to put all that together initially to produce a chronology, a narrative. I always do that first without really bothering myself with the issues."

"Sometimes the information will be conflicting. The patient might say: 'I went to see my doctor 26 times during that year complaining of my sore toe' and the medical records will have no reference at all to a sore toe. So what you do is set down both versions of the story – completely impartially and then you gradually work your way through to the end." Negligence cases rarely involve just one doctor so the expert report must also consider the actions of other primary and secondary care physicians involved, as well as support staff, such as nurses or ambulance personnel. In the end though the primary focus will be on the actions of the MDDUS member or members. Having set down the various narrative versions, Malcolm must then examine all the evidence and determine if the GP's actions constitute medical negligence.

The legal test of this in Scottish civil law comes from the landmark case of *Hunter v Hanley*, in which Lord President Clyde wrote that in order to prove liability in cases of clinical negligence "it must be established that the course the doctor adopted is one which no professional man of ordinary skill would have taken if he had been acting with ordinary care". A similar test (Bolam) applies in England.

Malcolm further explains: "Basically it means if you do something which no competent doctor would do if they were acting with reasonable care, then you fail the test. On the other hand, if you do what many competent doctors would have done then you don't fail the test. That doesn't mean you get to make a mistake, because obviously by definition a competent doctor acting with reasonable care wouldn't make a mistake."

Armed with evidence from the case documents and the criteria set out in legal decisions such as *Hunter v Hanley*, Malcolm must then form an opinion on whether the MDDUS member acted with "ordinary care". To do this he must examine the literature – guidelines produced by NICE or SIGN or other professional bodies, as well as any relevant academic papers.

"Guidelines are just that – guidelines," says Malcolm. "Not all are obligatory by any means. So if the doctor has done something that looks to me to be way outside of normal practice I will still check to make sure there aren't any papers out there that say this is a really good idea."

Causation

Breach of duty of care is only one element to consider. Most negligence cases also hinge on the issue of causation – that is, did the error cause actual harm to the patient or did it make a pre-existing situation worse.

Malcolm gives the example: "If I go and see my doctor tomorrow coughing up blood and he says – 'don't worry about it, you'll be fine' and then a week later I go and see one of the other doctors and he gets me X-rayed and it shows lung cancer. Then the first doctor has undoubtedly failed in his duty of care but nothing has changed. The diagnosis was made a week later, and a week later does not matter to the prognosis."

"The big legal argument tends to go around what difference did it make – the causation argument," says Malcolm, and this is most often addressed by secondary care experts – say a neurologist or oncologist – more qualified to judge the consequences of issues such as delayed or missed diagnosis.

Impartial advice

The product of all this deliberation is a draft medical report, and sometimes it does not make for comfortable reading. Says Malcolm: "There's often a lot of injured innocence when you put in the sentence 'in this particular situation the doctor fell below the standard expected of a responsible GP acting with reasonable care'. They immediately respond: 'he's saying I'm a bad doctor'. What it usually means is that they just made a mistake."

The member will be asked to respond to the report but more often than not it is only factual details that change, says Malcolm. "I would very rarely end up changing the conclusions."

The final expert report provides MDDUS advisers and

"It requires a certain turn of mind. A desire to get to the bottom of things... developing a story and then coming to a conclusion."

> lawyers a reasoned argument on how best to approach a case in consultation with the member, either to further dispute the allegations or to negotiate a settlement, most often with no admission of liability. Only rarely will a case go all the way to court.

> One common misconception is that an expert commissioned by MDDUS is somehow meant to act as an advocate for the member in his report. "Experts are completely impartial – they hate everybody!" says Malcolm. Joking aside, he is keen to emphasise that he is paid to provide only an opinion.

"Truth and justice – that's the name of the game. So if a case does come to court, you only have to speak the truth, which is easier to remember apart from anything else."

Profile by Jim Killgore, editor of MDDUS Summons

CLINICAL RISK REDUCTION

Simon Bennet *and* Michael Kelly *highlight some common pitfalls in the assessment and management of acute fractures*

CUTE musculoskeletal injuries form a significant proportion of the workload in both general practice surgeries and accident and emergency departments. Statistics from Edinburgh have shown that approximately one per cent of the population sustain a fracture each year. The consequences of missed diagnosis range from minor pain and inconvenience for patients, to adverse long-term outcomes and chronic functional limitation due to fracture non-union, joint stiffness and the need for later, more complex surgery.

Missed fractures form the majority of diagnostic errors made in A&E. Most doctors who have worked in A&E will remember their consultants at some point asking them to "take another look" at a certain patient's X-ray, gently informing them they have missed a fracture. Failure to detect an abnormality on an X-ray is the most common error, but failure to take an X-ray due to inadequate examination or appreciation of an injury, or ordering the wrong views also occur frequently. This is particularly true of junior medical staff working in A&E or general practice for the first time.

Clinical diagnosis and patterns of injury

The diagnosis of an acute fracture, like much of clinical medicine, is based upon an accurate history and a focused clinical examination, followed by appropriate imaging. Of crucial importance is the appreciation of injury mechanisms and therefore being alerted to associated injuries.

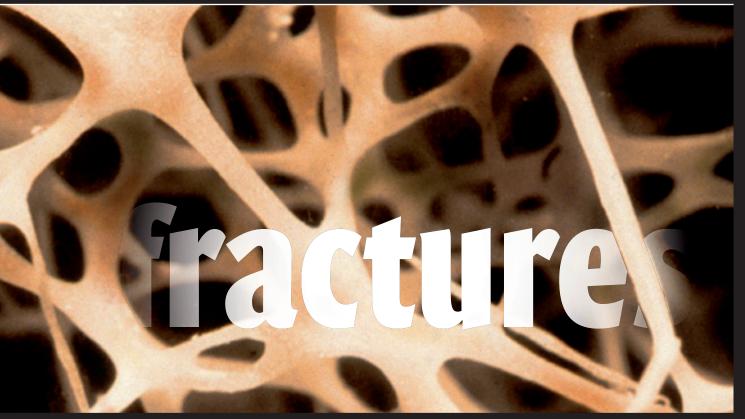
Often the history taken will be brief and may miss important features. The identification of higher risk mechanisms of injury and patient groups (such as the elderly and others susceptible to fragility fractures) will lead to a greater index of suspicion for certain injuries. For example, falls from a height over 5m are associated with calcaneal fractures. Moreover, this should prompt a search for associated injuries such as pelvic and spinal fractures, remembering that the presence of one major injury may distract both patient and doctor from other injuries. Shoulder pain following a seizure or electrocution is classically associated with a posterior dislocation of the shoulder that can be easy to miss on X-ray. The majority of presentations, however, will occur following relatively minor trauma.

In the assessment of upper limb injuries, the history should clarify the site of pain and swelling and any associated loss of function or movement. Commonly missed hand and wrist injuries include volar plate avulsion fractures, ulnar collateral ligament injuries, fractures of the base of the thumb and scaphoid fractures. Missing these often subtle injuries can lead to chronic pain, early osteoarthritis and reduction of hand function. Examination should elicit signs of bony tenderness, swelling, reduced range of movement and joint laxity. Clinicians should therefore adopt a low threshold for obtaining appropriate X-rays and follow-up X-rays where appropriate (e.g. suspected scaphoid injuries).

The evaluation of forearm injuries should include a careful examination of both the wrist and elbow joints, as a fracture of one bone can lead to shortening and the resultant dislocation of the other. If the radius is fractured and shortens, the ulna tends to dislocate at the distal radio-ulnar joint (Galleazi injury). In the case of an ulna fracture, the radial head dislocates from the radiocapitellar joint at the elbow (Monteggia injury).

Patients sustaining lower limb injuries who cannot weight-bear should be considered to have a fracture until proven otherwise. The Ottowa ankle rules, when applied correctly, have a very high sensitivity for identifying ankle fractures. These involve obtaining ankle X-rays when a patient has the triad of malleolar pain, tenderness and inability to weight-bear. This principle can also be logically applied to other areas of the lower limb.

Knee injury assessment should identify the presence of a haemarthrosis, which the patient will report as immediate swelling in the joint, rather than a reactive effusion taking many hours to develop. In the absence of an obvious fracture, a high suspicion of collateral and cruciate ligament injuries or a chondral injury



PHOTOGRAPH: 'PHOTO RESEARCHERS, INC.'/SCIENCE PHOTO LIBRARY

should exist and patients should be referred to an acute knee clinic.

X-ray interpretation

Ordering the appropriate X-rays is the first step to making the correct diagnosis. For example, the clinician must decide whether a patient presenting with wrist pain needs wrist X-rays or specific scaphoid views, and a focused examination is the key to getting this right.

Next, one must assess the adequacy of the views taken. The lateral cervical spine X-ray is the most useful in identifying vertebral fractures and dislocations, however the C7/T1 junction is frequently missed off the bottom of the image – an area prone to injury due to the change of the curvature of the spine from lordosis to kyphosis.

A minimum of two views of any injured area is mandatory and oblique views should be obtained where there is a strong clinical suspicion of a fracture that is not readily apparent on standard AP and lateral films. In the case of the shoulder, an axillary view can be helpful and in the knee a 'skyline' view, which examines the patellofemoral joint. Knowledge of an area's anatomy and the normal relationships between bones is crucial when interpreting abnormal X-rays.

X-rays should be centered on the area of concern to prevent parallax distortions. Therefore with a wrist injury, radiographs of the forearm that include the wrist may lead to subtle injuries being missed.

Identifying a major long bone fracture from across the room can be relatively straightforward, however more subtle injuries require a systematic approach to X-ray interpretation. When assessing elbow X-rays, for example, the alignment of the bones must be scrutinised. On the lateral view, a vertical line drawn down the anterior cortex of the humerus should cross the middle third of the capitellum. Similarly, a line extended up the shaft of the radius should also cross the capitellum. Slight disruptions of these parameters can signify a fracture, or dislocation around the elbow. Furthermore, soft tissue signs, such as a raised anterior fat pad in the elbow, can aid in the diagnosis of subtle fractures.

In the knee, the presence of a lipohaemarthrosis can be readily identified by the presence of a fat-fluid level in the supra-patellar pouch seen on the lateral X-ray - this is another good example of a soft tissue sign. This occurs because fat is released from a fracture or ligament avulsion and floats on top of blood, which is denser.

Finally, it is important to appreciate the limitations of plain X-ray in identifying all fractures. If a patient suffers a fall, sustaining a hip injury and clinical examination is strongly suggestive of a fracture, a normal X-ray does not exclude the diagnosis. As per NICE guidelines, they should go on to have further imaging of the injured area in the form of an MRI or CT scan. This also applies for suspected scaphoid fractures, as a delay in treatment increases the frequency of non-union.

Summary points for risk reduction

- Maintain a high index of suspicion for a fracture in nonweight bearing patients and those with high-risk mechanisms of injury.
- Always perform an accurate examination and localise the site of the injury.
- Understand injury mechanisms and patterns and actively look for associated injuries.
- Have a low threshold for obtaining additional views and do not accept inadequate X-rays.
- Develop a systematic approach to assessing X-rays.
- Request CT or MRI scans for high-risk areas when a patient appears to have a fracture clinically, but the X-ray looks normal.

Mr Simon J Bennet is an orthopaedics SpR in the Severn Deanery and Mr Michael Kelly is a consultant orthopaedic trauma surgeon at Frenchay Hospital in Bristol

Taking CONTrol

NES decontamination adviser Irene Black offers some tips to dental practices on how to keep in line with the latest guidance



NFECTION control is a high-profile issue for dental services and one that has inspired considerable media coverage in recent years as well as numerous case histories in dental journals.

But while decontamination has been a more contentious issue for dentistry since the introduction of HTM 01-05 requirements by the Department of Health, it's important not to overlook other aspects of infection control which are just as significant in terms of patient safety.

Three areas of infection control that cause most concern to patients and patient safety organisations are hand hygiene, the use of personal protective equipment and the re-use of single use items.

Despite it being the basic first step in achieving infection control, evidence suggests healthcare professionals still don't apply hand hygiene as consistently as they should. Good hand hygiene before and after patient treatment episodes, in conjunction with wearing and changing disposable gloves, is an essential requirement for all dental care professionals and is the cornerstone of good infection control.

Similarly, dental personnel must also know their responsibilities in terms of the safe use of personal protective equipment such as surgical masks, protective eyewear and protective clothing.

Single-use items reduce the risk of patient-topatient transmission of infection but policies on their use differ across the UK. In Scotland in 2004, endodontic instruments were designated high-risk items after research showed endodontic files couldn't be cleaned effectively, thus raising the risk of residual contamination with nerve tissue and potentially prions. Based on this evidence, disposal of endodontic files after single use was deemed essential north of the border.

However, the situation in England differs. Following a review in 2010, re-use on the same patient at subsequent visits is considered acceptable providing they are marketed as re-useable and stipulations for re-processing and traceability are adhered to precisely.

What remains clearly unacceptable anywhere in the UK is the re-use of equipment carrying the single-use symbol, as this would breach requirements set out by the Medicines and Healthcare products Regulatory Agency.

Key to the consistent application of infection control precautions is providing adequate dental equipment. Problems can arise if practice owners or management fail to provide or restrict the use of items essential to meet the standards. No dentist would want to be on the receiving end of a complaint from a concerned team member who has been obstructed in attempting to apply current standards.

Decontamination

Decontamination is still an emotive subject for general dental practitioners across the UK. Over the last few years there has been a gradual change in attitude from disbelief to a disgruntled acceptance that these requirements are not going to go away.

When *HTM 01-05: Decontamination in dental care practices* was finally published by the Department of Health in 2009, the same general principles were applied south of the border and in Northern Ireland. The difference in the details of the guidance and differing timescale are contentious and are unlikely to be resolved soon.

Compliance in decontamination is complex but the general principles are:

- A separate LDU facility
- Process documented and applied
- Decontamination equipment installed, validated, tested and maintained
- Quality management system
- Documented training.

The main focus has been on the need for a local decontamination room outside the clinical area. In Scotland in 2007 the details of Local Decontamination Unit (LDU) design were set out in Scottish Health Planning Note 13. Although the general principle of the facility design was unchanged, the scale and the preferred option of the two-room models posed significant difficulties, particularly for those already challenged in terms of space. The preference for a two-room LDU was based on a need for risk reduction as the one-room model risks clean and dirty instruments becoming mixed up.

There appears to have been a slow acceptance by the healthcare authorities that this may have been unrealistic for the majority of dental practices. Although two rooms remains the preferred option, recent discussions indicate a one-room model following the design principles of Health Facilities Scotland's SHPN13 guidance will be acceptable. The critical requirement within the one-room LDU is that processing must be carried out correctly and consistently by all staff. The decontamination process includes transport, segregation, cleaning, inspection and sterilisation of reusable items. To achieve this, written policies and procedures must be in place and must be understood by all staff involved in decontamination.

Training for the whole dental team is essential to ensure decontamination processes are applied effectively and that each person knows their role and is competent to carry it out. Apart from the GDC requirement for all registrants to have five hours training in a five year CPD cycle, it is essential that decontamination is part of new staff induction, with regular updates for the whole team.

Decontamination equipment, essentially the bench-top steriliser, has been used for many years in dental services. But focus has shifted more recently to the potential risk of prion contamination which requires a higher standard of instrument cleaning. Compliance requires the use of a washer disinfector while manual cleaning should only be used for items incompatible with automated processing.

All decontamination equipment should be installed and validated before use, with testing and maintenance carried out compliant is not clear.

Compliance is likely to be reviewed through a new practice inspection document which is currently being developed. This will look at details of requirements for decontamination facilities, equipment and processes. It is hoped health boards will retain the responsibility for inspections as part of the requirements of current terms of service. The role of other external organisations in this process is still not entirely clear.

After the significant changes introduced in recent years it is clear that a period of consolidation would be welcomed. A need to review existing decontamination guidance in light of improving technology has been identified, as well as the need for a more risk-based approach to the requirements. This is unlikely to mean a relaxation in current standards but perhaps a more realistic approach to their application would be the best outcome for all dental professionals.

Health boards and health protection agencies take all potential breaches in infection control very seriously. If they are involved in investigating infection control errors or omissions this can result in the notification of all patients deemed to be at risk. These events are emotive and often create significant media interest which can be devastating for both patients and the

"Recent discussions indicate a one-room model following the design principles of Health Facilities Scotland's SHPN13 guidance will be acceptable."

according to the manufacturer's instructions. Audit is another essential element to assure both the practice and external agencies that all processes are being applied consistently and effectively.

The future

One question frequently asked by dentists in Scotland is what will happen if they can't/don't/ won't comply? By 31 December, 2012 all health boards will be required by the Scottish Government to report on decontamination compliance in dental services. The fate of those who are nonpractice involved.

The best approach to infection control and decontamination for all practices is to ensure the whole dental team are fully aware of their responsibilities and the potential pitfalls if it all goes wrong. The need for policies, training and evidence of consistent good practice cannot be emphasised strongly enough.

■ Irene Black is a general dental practitioner and assistant director (decontamination) with NHS Education for Scotland (NES)

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.

DIAGNOSIS: CAUTION SOMETIMES BEST

BACKGROUND: A 32-year-old woman – Mrs J – makes an emergency appointment at her GP surgery complaining of prolonged intermittent vaginal bleeding, abdominal cramps, sickness and diarrhoea. She is seen by a locum GP – Dr K.

Dr K records that the patient had stopped taking the contraceptive pill two months previous, planning to conceive. Her cycles have been irregular and she believes her last normal period was just over two weeks ago when the bleeding started. Mrs J is now wondering if there is any chance she might be having a miscarriage or an ectopic pregnancy. Dr K tells her that this is unlikely but advises the patient to try a home pregnancy test and phone back if positive.

Mrs J phones back later that afternoon and reports that the pregnancy test is indeed positive. Dr K asks her back into the surgery and examines the patient. He notes a "soft abdomen" with no tenderness. No vaginal examination is undertaken. A provisional diagnosis of threatened miscarriage is made and Mrs J is advised to rest and come back if she has any problems with pain. A follow-up appointment is made for Mrs J to attend her regular GP who is then on holiday. The patient does not attend.

Two weeks later Mrs J appears at A&E one late evening complaining of severe abdominal pain and heavy bleeding. A transvaginal scan reveals a possible ectopic pregnancy. Her serum hCG level is raised and she is commenced on methotrexate to halt the pregnancy. The next day she is reassessed because of increasing pain and is taken to theatre for a laparoscopic left salpingectomy. Histology confirms an ectopic tubal pregnancy.



ANALYSIS/OUTCOME: Six months later Dr K receives a letter of claim alleging clinical negligence from solicitors acting for Mrs J. It states that the treatment by Dr K was substandard in that he should have organised an urgent referral to a hospital or clinic for further investigations that would have revealed the ectopic pregnancy. The letter further alleges that had Mrs J been referred on the day she attended the medical centre, the ectopic pregnancy would have been diagnosed and treatable with the agent methotrexate. In the over two-week delay her pregnancy had advanced such that surgical management was the only viable option.

Dr K contacts MDDUS and provides a response letter. He defends his decision not to refer stating that examination of the abdomen had revealed no tenderness. Neither were general abdominal pain or heavy bleeding features in the diagnosis – although this is contradicted by the letter of claim.

MDDUS commissions a medical report from a primary care expert who examines the patient notes and all other relevant records. He judges that Dr K should have considered the possibility of an ectopic pregnancy given the fact Mrs J had a positive pregnancy test and was having abdominal pain and irregular bleeding – also the patient had expressed an explicit concern.

Another report by a consultant obstetrician and gynaecologist confirms that had Mrs J been referred and diagnosed within two days of the initial presentation, her serum hCG levels would have been within the "success with methotrexate" range and – on the balance of probabilities – surgical intervention would not have been necessary.

MDDUS lawyers and advisers in discussion with Dr K decide it is best to settle the case with no admission of liability.

KEY POINTS

- Sometimes it is best to err on the side of caution when faced with a referral decision especially with explicit patient concern.
- Provide clear instructions to patients on what action to take if symptoms change.

TREATMENT: ONLY WHAT'S NECESSARY

BACKGROUND Mr Z has attended his regular dentist for three years, mainly for routine scale and polish. His dental health has always been judged as good, with satisfactory oral hygiene and only minor gingivitis. He phones the practice in early June to ask for a routine check-up as he is going on an extended holiday to visit family abroad.

The practice is extremely busy and cannot give him an appointment before his departure so Mr Z makes an appointment at another practice. Here he is seen by Mr H. The patient notes record that Mr Z complained of pain in the upper right side of his mouth and Mr H notes an exposed root on the upper right molar, UR7.

An X-ray is taken covering three teeth: UR5, UR6 and UR7. The dentist tells the patient that this has revealed "some holes" that he will fix. No further explanation is given nor any indication of how many teeth are involved. Mr H carries out root treatment on UR5 and UR6 and submits a claim to Practitioner Services.

Mr Z returns to the surgery two days later aware that he cannot close his teeth properly, and the bite is adjusted in the fillings. The patient expresses concern that Mr H has carried out unnecessary treatment on his teeth. Three months later Mr Z returns to his regular dentist for a check-up and discusses his worry about the treatment carried out by Mr H. The dentist expresses his surprise as he had noted no problems with the teeth in previous consultations with Mr Z.

Six months later Mr H receives a letter from solicitors acting on behalf of Mr Z requesting a copy of his patient records. This is later followed by a letter of claim alleging negligence in the dentist's treatment of Mr Z, along with an impartial expert report.

ANALYSIS/OUTCOME Mr H sends copies of the letter and the report to an MDDUS adviser who reviews the material along with an in-house solicitor. Mr Z claims that he was subjected to unnecessary dental treatment, including the root filling of two teeth – and this conclusion is supported by the expert opinion.

Among his criticisms of Mr H's treatment of the patient, the expert points out that the patient notes are "very sparse" and record no clinical/ radiological reasons why the treatment was necessary, no results or evaluation of the radiographs taken and no recording of the working lengths for



the root fillings of UR5 and UR6.

Examining the pretreatment radiograph he finds that it is "coned off", providing no useful view of UR5 and no evidence of decay or pathology present in UR6.

Working length radiographs of both teeth taken during treatment are poor, having missed most of the roots. Both should have been retaken.

Later radiographs taken of the two teeth show that Mr H has also failed to adequately obdurate all of the root canals of UR5 and UR6. The expert judges that both will need to be retreated. He concludes that the dentist has failed in his duty of care. MDDUS advisers and lawyers judge the allegations indefensible and in discussion with Mr H decide to settle the case for a modest amount.

KEY POINTS

- Provide justification in the notes for all treatment undertaken.
- Record discussions with the patient regarding informed consent and the treatment plan.
- Record evaluation of radiographs including working lengths.
- Consider retaking poor radiographs if used to justify decisions.

DIAGNOSIS: A RARE FEVER

BACKGROUND: GP, Dr Y, is called out to the home of a 61-year-old man, Mr J,



who presents with a three-day history of fever and fatigue. He tells the doctor he has recently returned from a holiday in India. Dr Y examines Mr J,

measuring his temperature by hand, and diagnoses him with influenza, prescribing a course of antibiotics.

Mr J takes the medication but his condition deteriorates over the next two days and he begins to have difficulty breathing. His family call an ambulance and he is taken to hospital where he is diagnosed with falciparum malaria. He is immediately given the appropriate drug treatment but his condition does not improve and Mr J dies a week later.

Mr J's family lodge a claim of clinical negligence against Dr Y, arguing that he would still be alive had he been referred to hospital for treatment during the home visit.

ANALYSIS/OUTCOME: Dr Y informs MDDUS of the claim and writes a detailed summary of the circumstances of Mr J's case. He explains that he had carried out a full examination of Mr J but had not considered malaria as a potential diagnosis, despite being told the patient had recently been on holiday. He adds that he has written a letter of apology to the family, reassuring them that he has since undergone further training in malaria diagnosis.

MDDUS, acting on behalf of Dr Y,

commissions expert reports from a GP and a consultant in infectious diseases. The reports are critical of Dr Y's failure to consider malaria and did not support his diagnosis of influenza. An adviser discusses the reports with Dr Y and they agree that it would be in his best interests to settle the case.

KEY POINTS

- Tropical diseases should always be considered in all cases of fever in patients who have been abroad, whether to malaria regions or not.
- Where fever is the main/only symptom, consider using a thermometer to achieve a more accurate temperature reading.
- Prompt diagnosis and referral is a matter of urgency in malaria.

ADDENDA



Crossword

1	2		3		4			5	6	7
							8			
	9									
10							11	12		
13		14				15			16	17
					18					
19	20		21		22		23			
	24									
25				26						

ACROSS

- Complete or incomplete 1. break in bone (8)
- Soft tissue in tooth cavity (4) 5.
- 9. Management and care of patient (9)
- 10 Malady (7)
- **11.** Encephalon (5)
- **13.** Anatomically far away (6) 15. Excessive fluid around
- cells (6)
- Old name for Type II Diabetes (abr.) (5) 19.
- **22.** Inflammation of mucous membranes (7)
- **24.** Malignant new growth of epithelial cells (9)
- 25. Common viral infection (4)
- **26.** Simple diabetes (8)

DOWN

- Inundated (7) 1. 2.
- Swears (7) Greek letter (5) 3.
- 4. Decayed (6)
- 6. Extreme (5)
- Infectious agent in BSE? (5) 7. Fellow countryman of Milla Jovovich or Slobodan 8.
- Milošević (4)
- 12. Metal bar (3)
- 14. Small amount (3)
- 16. US aviator, Amelia (7)
- **17.** Sticks to (7)
- 18. Writer (6)
- 2000s pop act featuring Justin Timberlake (1-4) 19.
- **20.** Transfer (5) 21.
- Regulates medicines in the UK (acronym) (4)
- 23. Twitter pest (5)

See answers online at www.mddus.com. Go to the Notice Board page under News and Events.

From the archives: waste not. want not

IMAGE COURTESY OF BDA MUSEUM

Life in a Victorian workhouse was undoubtedly hard. Entry in most cases was voluntary, an act of last resort due to extreme poverty, sickness or mental handicap. No one could leave the workhouse without permission and life was pretty much determined by the decisions of a local Board of Guardians, who could at times seem callously officious. Consider this short item published in 1898 in the British Journal of Dental Science.

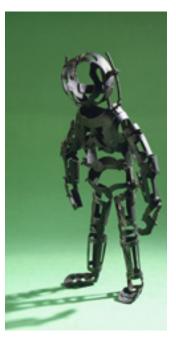
TEETH LENT. – We have read that the East Grinstead Guardians ordered a set of artificial teeth for an inmate on the understanding that the equipment should be on loan and when no longer needed should be "returned into store." "When no longer needed" is good, distinctly good. After the fortunate one dies or has erupted the proverbial third set of teeth, the equipment should find a resting place under a glass case in the store. Perhaps, however, the Guardians meant that the inmate should not take them outside, lend them to someone else, and, returning toothless, demand a fresh equipment. Here we have the picture of the inmate torn with conflicting doubts. To stay in the House and chew, or to get work outside and mumble the bread of liberty. The cost, we see, is to be £3 10s., not a large sum, but if endentulous persons were allowed to leave with dentures there would probably be an increasing stream of entries relying upon the same treatment.

Source: Article clipping Tweeted by Helen Nield, library manager at the BDA

Object obscura:

articulated iron manneguin

PHOTOGRAPH: SCIENCE MUSEUM/SSPI This mannequin found in the Science Museum in London dates from 1570 to 1700 and was used for demonstrating bone setting. It may have been invented by Hieronymus Fabricius (c 1533-1619), Italy's foremost surgeon in the late 16th century, who devised operations for tying arteries and correcting spinal deformities.



ADDENDA

Vignette: surgeon and organ transplant pioneer Sir Michael Francis Addison Woodruff (1911-2001)

PHOTOGRAPH: THE SCOTSMAN PUBLICATIONS LTD

FAME came to Professor Michael Woodruff in 1960 when he performed the UK's first successful kidney transplant at Edinburgh Royal Infirmary. This landmark achievement was the result of years of research as well as an innate ingenuity demonstrated early in his career in the unlikely setting of a Japanese prisoner of war camp.

Woodruff was born in London, the son of a professor of veterinary medicine. He moved to Australia with his father in 1917 following his mother's death and was educated in both Britain and Australia.

He won a government scholarship to read electrical engineering and the first two years of a maths degree at the University of Melbourne but, fearing poor employment prospects, he added a medical degree (MBBS with Honours and two prizes in surgery). Sport, the student Christian movement and learning to play the college organ occupied his spare time. By this time he had grown tall and his lower jaw protruded slightly giving him a pugnacious aspect.

He earned his MD and studied tropical medicine before being called to active service in WW2 as a captain in the Australian Army Medical Service. Soon he found himself in the notorious Changi Prison Camp. During his three and a half years imprisonment he persuaded his Japanese captors to allow him responsibility for improving the men's diet as he could see they were at great risk from vitamin deficiencies. He devised a life-saving method of extracting vitamin rich nutrients from grass and agricultural waste. Building and running the equipment required great ingenuity and he began treating prisoners in other camps.

Post-war, in 1946, he met and married Hazel Ashby, an able researcher who shared many of his interests and contributed to his future research projects. He took his new wife to England and in 1947 passed the FRCS exam – a result that, in Woodruff's view, was certainly not hindered by the fact that one of his examiners, Colonel Julian Taylor, had been with him in Changi.

Woodruff then took a post as tutor in surgery in Sheffield. There he studied



transplant rejection with a particular interest in thyroid allografts to the anterior chamber of the eye as these did not appear to meet with rejection. He met accomplished physician and biochemist Hans Krebs and also consulted another great scientist, Peter Medawar, noted for his work on graft rejection and his discovery of acquired immune tolerance.

He moved to the University of Aberdeen in 1948 and, with his wife as lab assistant, he continued his transplant research. Eager for promotion, in 1953 Woodruff moved to New Zealand as professor of surgery at the University of Otago Dunedin School of Medicine. Among his duties was the treatment of burns and his response was the establishment of a frozen skin bank. The patient population was small and he found that able students left. Eventually, in 1957, he landed the post of professor of surgery at the University of Edinburgh.

It was a tradition at Edinburgh for surgeons to be harsh with their students and Woodruff's pupils were known to fear his temper. In social situations, however, he was amicable. He owned a succession of yachts, often manned by junior staff pressed into his service. He was also a member of the famous Athenaeum club an elegant place in London to entertain visiting collegues alongside the famous.

On arrival in Edinburgh the promised research facilities were unavailable. The occupants were removed and and he continued his tissue transplant work in the Wilkie Research laboratories. He employed specialist biological scientists, something almost unheard of at the time. Building on his work in Sheffield, Woodruff investigated the possible use of antilymphocytic serum as an immunosuppressive agent to suppress allograft rejection.

Following visits to the United States and Canada he had a plentiful supply of cortisone as an additional agent. It was only later that the now widely used immunosuppressant azathioprine would become available. While at Edinburgh, Woodruff was made honorary director of a research group on transplantation.

The world's first successful human kidney transplant had been carried out on identical twins by Joseph Murray in Boston in 1954. At the end of October 1960 Woodruff showed it could be done in Edinburgh too. He had finally found the right patient, a 49-year-old man suffering from severely impaired kidney function who received one of his twin brother's kidneys. The twins went on to live a further six years before dying of an unrelated disease. Following this transplant triumph, 127 patients were treated between 1960 and 1976, many operated on by Bernard Nolan.

Woodruff was elected FRS in 1968 and knighted the following year. In 1974 he received the Lister Medal and served as president of the Transplantation Society from 1972 to 1974. He gave the Macewen Memorial Lecture in Glasgow in 1976 entitled "And ghosts shall drive you on". That year he retired from active surgery but continued research.

After retiring, he spent 10 years engaged in cancer research, publishing in 1980 *The Interaction of Cancer and Host: Its Therapeutic Significance*. He held the post of director of the Nuffield Transplantation Unit until 1986 and his autobiography *Nothing Venture, Nothing Win* was published in 1997.

Without a doubt, the dedication of Michael Woodruff and of those involved in kidney transplant surgery saved many lives.

Julia Merrick is a freelance writer and editor in Edinburgh

DON'T MISSS OUT CHECK OUT THE MANY BENEFITS OF MDDUS MEMBERSHIP

MDDUS members are entitled to exclusive discounts on a range of medical and dental books and journals.

DISCOUNTS INCLUDE:



at Hodder Education

at Scion Publishing



For further information contact our Membership Service Department on

0845 270 2038 www.mddus.com