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Dr Abraham, trainee doctor

"An extremely powerful course: in my opinion, should be mandatory for all junior doctors." Dr Abraham, trainee doctor

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I am always surprised how much these workshops are worth repeating on a regular basis." Dr Mirlin, P2

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MPS medicolegal adviser Dr Pallavi Bradshaw reflects on the negative impact fitness to practise procedures can have on a doctor’s health

In December 2014 the GMC published a report about cases where doctors committed suicide while undergoing GMC fitness to practise procedures. Out of the 28 doctors, two were in their foundation years.

Many of the doctors had known mental health problems or drug and alcohol dependence. However, there was an acknowledgment that more must be done in all cases to support doctors.

The report said that any doctor referred to the GMC should be considered to be vulnerable and therefore supported and assisted in a compassionate manner. The report further acknowledged that given the stress of the investigation process, any doctor could develop mental health problems, or an addiction habit, as the nature of the investigation process is highly stressful.

While saddened by the report’s findings, I was not entirely surprised. I see all too often the negative impact GMC investigations have on doctors and while most will be dismissed without further action the damage of the process cannot be underestimated.

To coincide with the report MPS carried out a survey of 180 members who had been the subject of a GMC investigation in the past five years. Ninety-three percent reported stress and anxiety with 75% stating an impact on their personal life. Many also lost confidence and this in itself can lead to behaviours not conducive to good clinical practice. More than a quarter considered exiting the profession with one in ten changing their role or leaving.

It is important that any new doctor struggling to cope, whether under GMC investigation or not, should seek help and support as soon as possible from their deanery, educational supervisor, occupational health representative and/or GP.

MPS has a confidential counselling service for members with open cases and the BMAs Doctors Providers Psychological support service is welcomed, as is the need to treat a doctor as ‘innocent until proven guilty’ – surely a fundamental principle of our justice system.

Access Doctors who commit suicide while under GMC fitness to practise investigation at www.gmc-uk.org.
Miss Francesca Th’ng and Mr Marios Patronis share the case of Mrs A, who sadly died following the insertion of a chest drain after surgery.

**CASE REPORT**

Mrs A, was admitted for a triple coronary artery bypass graft operation for her HSTIM. She had a past medical history of thoracic (T9-T10) spinal fusion for fractures secondary to a viral illness more than 20 years ago. Her cardiac surgery went ahead as planned with no apparent complications.

Two weeks later she re-presented to the cardiothoracic surgeons with shortness of breath and pleuritic chest pain. Her readmission bloods (full blood count and urea and electrolytes) were within the normal ranges.

She was then given a therapeutic dose of heparin for the likelihood of a pulmonary embolus (see Box 1). Later that day, a CT pulmonary angiogram revealed that she had pleural and pericardial effusions, a partially collapsed right lower lobe and no pulmonary embolus. The area for pleural fluid drainage was marked on the right side of her chest under ultrasound in the Radiology department (see Box 2).

While on the wards, Mrs A’s respiratory system started to compromise and an urgent chest drain was inserted with a blunt dissection technique by an experienced surgeon, Mr B.

During the procedure, Mr B felt thin fibrous strands on finger sweeping of the chest cavity. These were thought to be adhesions within the chest cavity post cardiac surgery. The strands were separated by the surgeon’s finger with ease and the chest drain was inserted with no resistance.

The chest X-ray that was taken after the chest drain insertion demonstrated the intercostal drain to be in the patient’s abdomen (see Box 3).

Shortly afterwards, Mrs A became haemodynamically unstable with severe haemorrhaging from the drain site, before arresting. She was resuscitated in the Cardiothoracics Intensive Care Unit and was brought into theatre.

A laparotomy revealed a lacerated diaphragm and traumatic injury to segment 5/6 of the liver. The haemorrhagic points were packed and the chest drain was withdrawn a few centimetres to be repositioned in the chest cavity (see Box 4).

In the days that followed Mrs A developed multi-organ failure and continuous veno-venous haemofiltration had to be commenced. Her sedatives were stopped temporarily, but she did not regain consciousness.

A CT scan of her brain four days after the laparotomy showed a large left middle cerebral artery territory infarct (see Box 5). Her prognosis was discussed with her family and they were in agreement for treatment to be withdrawn the next day. The patient passed away peacefully a day after treatment was stopped.

This case highlights the importance of a patient’s past medical history on initial assessment, even when it is seemingly unrelated to the proposed procedure.

**WHAT WENT WRONG?**

Mrs A’s past medical history of spinal fusion surgery for thoracic vertebrae nine-ten fractures, played a role in altering her thoracic anatomy and misplacing the chest tube, which led to her devastating outcome.

This case is interesting because there is no similar literature or reports about the implications of spinal surgery on the insertion of chest drains found in PubMed, MEDLINE or EMBASE databases.

Mr B, an experienced surgeon, inserted the chest drain, he had not had any previous complications in any of the 500 chest drains he had inserted before. The texture of Mrs A’s diaphragm indicated that it was easily friable, fibrosed and most likely had tented upwards into the chest cavity.

The adhesions assumed to be between the chest wall and the lung during the procedure were proven not to be the case; rather they were adhesions between the chest wall and the diaphragm, and between the liver and diaphragm.

It is also believed that the tip of the chest drain did not cause the liver haemorrhage, but rather it was the shearing of the liver and diaphragm.

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If the patient hadn’t needed an urgent chest drain, would a coagulation screen prior to the procedure have detected any coagulopathy?

Also, if the patient’s past medical history had been given more consideration, would the chest drain insertion have been carried out under ultrasound guidance throughout the whole procedure?

Taking into account that the success rates of image guided chest tube insertion has been reported to be only 71-86%, would she had real time imaging during the procedure have prevented this tragedy?

Miss Th’ng is an SHO and Mr Patronis is a cardiothoracics SPIR.
MPS ADVICE

MPS medicolegal adviser Dr Gordon McDavid comments on the case.

This tragic case highlights the risks involved in all medical procedures – even those carried out relatively frequently. It offers a stark reminder of how challenging medicine can be – diagnostic uncertainty often requires doctors to consider the most likely and most significant diagnosis, which may later turn out to be incorrect; in this case the presumed PE.

Fortunately, chest drain complications are rare. However, it is important that care is taken before any procedure to ensure the patient has provided their informed consent and that conditions are as safe as possible. If there is any doubt, the procedure should be postponed until you have investigated further; provided it is clinically appropriate to do so.

In this case, the patient required a chest drain as an emergency which meant that the usual careful pre-procedure consideration could not be undertaken. A doctor would be expected to act in a patient’s best interests at all times. Action should be taken to save their life or prevent serious deterioration in a patient’s condition.

When an adverse event occurs, investigations will follow. It is vital that meticulous notes are made contemporaneously. This will assist the doctor by explaining what happened at the time and offering justification for the steps taken.

The surgeon who carried out the chest drain insertion will undoubtedly feel terrible about what happened. It is important to remember that mistakes do happen. The most important step following any adverse event is to ensure the patient is looked after.

When suitable, the patient should be informed openly about what happened – in this case, as the patient did not recover, that explanation should be offered to the family in an honest and considerate way.

An adverse event should be formally reported so that it can be thoroughly investigated to consider if any steps should be taken to prevent recurrence.

The individuals involved should participate in that process fully, but see it as a learning exercise, rather than a process to attribute blame.

Those involved should also undertake personal reflection no matter how serious they are. Discussion with colleagues is also helpful, to consider what they would have done in similar circumstances. Any adverse event should be discussed at the doctor’s appraisal too.

In conjunction with the hospital’s internal review, there may be other processes that arise out of an adverse event. Where a patient has died, it is likely the case will be considered by the coroner or procurator fiscal who may call an inquest or fatal accident inquiry. To assist in such investigations, a professional report will be sought from those involved. Therefore it is useful for a doctor to compose a draft report as soon as possible after an adverse event.

Remember that MPS remains on hand for members to contact for advice. Offering more than just defensive, we can assist in annotating a professional report and offer guidance, advice and support through the multiple processes that may arise out of a clinical incident.

When things go wrong, a complaint from the family may follow – either directly to the hospital or through other channels, such as the GMC. They may also attempt to claim for damages. You can contact MPS for advice if such developments transpire.

REFERENCES

It is important that care is taken before any procedure to ensure the patient has provided their informed consent.

FIVE OF THE BEST...

DOCTORS IN FICTION

By John Mullan, head of English at UCL and Guardian columnist

ALLAN WOODCOURT

Esther Summerson, the heroine of Dickens’s Bleak House, is very good indeed, so who will be a suitable love interest? The “dark young surgeon” Allan Woodcourt qualifies. “He was, right and day, at the service of numbers of poor people and did wonders of gentleness and skill for them…“ He goes off to China and India to help even poorer people and returns for the happy ending.

DR ZHIVAGO

Try to forget Omar Sharif in Boris Pasternak’s novel. Yuri Zhivago is a humane doctor and ultra-sensitive poet who lives through the horror of Russian history in the 20th century. Lara, the love of his life, is not only beautiful and brilliant, she is a volunteer nurse during the First World War. Their love blooms in India to help even poorer people and returns for the happy ending.

LADY MACBETH’S DOCTOR

Surprisingly enough, the staff at Dunsmuir includes a wise physician who, though ignorant of his employers’ dark deeds, watches Lady Macbeth sleepwalking and knows she has done something bad. “Unnatural deeds / Do breed unnatural troubles”. The “good doctor”, as he is called, tells Macbeth he has no cure to offer.

NEXT TIME… BAD DOCTORS

DR WATSON

Dr John Watson, fresh from service as an army surgeon in Afghanistan, is taken on by Sherlock Holmes as a flatmate to be “a whetstone for his mind”. Conan Doyle had to make Holmes’s stooge (and the narrator of all his detective adventures) a doctor. He is trustworthy, loyal, benevolent and literal-minded. And his experience as a doctor has taught him to talk to the ladies.

DR DOLITTLE

The gentle hero of Hugh Lofting’s children’s books is clearly supposed to be good, and he is certainly well located where he lives and works, in the quiet English village of Puddleby-on-the-Marsh. But he does grow to like animals rather more than people, and his patients are eventually frightened off by his swelling menagere.
We share the opinions of trainee doctors on hot medical topics

James Tomlinson, a simulation fellow in surgery, argues that we need to look outside the medical world to enhance our understanding and utilisation of simulation training.

A recent PubMed search for 'simulation training' produced more than 17,000 results – a huge number for what is a new area. Some argue that simulation training can increase the efficiency of learning, improve patient outcomes, and reduce healthcare costs. I would argue that simulation training is more about evolution than revolution.

Firstly, recent research on laparoscopic skill simulation found that although metrics can be improved with independent practice, the role of an expert coach in developing clinically relevant skills is of key importance. For simulation to be effective it would need expert faculty to feedback; this would require senior clinicians being away from clinical duties, which would have implications for time and costs for hospitals.

Further work is required to establish what approach should be taken to maximise the educational benefit of simulation. Many current simulators, especially those within surgery, focus on the reproduction of entire procedures rather than the skills that are needed to perform those procedures. This is significant because commercial interests are increasingly driving the acquisiton of a large amount of equipment rather than the educational need for it.

Trainees are relied upon to provide patient care on a day-to-day basis and removing them from the clinical environment to train in a lab creates a barrier between doctors and their patients. We cannot expect trainees to engage in simulation training during non-working hours without it having a significant impact on their work-life balance and potential implications for their mental and physical wellbeing.

Shifting the burden of simulated training on to unpaid time is wholly unacceptable. There is a very real risk that simulation training is perceived to be an educational revolution that will improve training. If simulation is to be used effectively in medical training it requires significant commitment from trainers.

There are important lessons to be learned from educational psychology work in sport and music where the role of deliberate practice has been studied for many years, and there is little point in reinventing the wheel by repeating this work.

Simulation offers the opportunity to hone our skills, but we must look outside the medical world if we are to maximise its full potential.

James Tomlinson is a leadership fellow (simulation) HEYH, ST8 orthopaedics.

Read a useful article about the role of surgical simulation in enhancing patient safety here: www.medicalprotection.org.uk/casebook-and-resources/new-doctor/vol-6-no-2-2013/robodoc

REFERENCES
Dr Caroline Whymark describes her first day in theatre

I found the door that led out to the theatres and found theatre six. I put on a mask and timidly entered. The patient was already anaesthetised. The sister had just finished setting up the instruments. My registrar was at the sink, his arms covered in pink froth from the surgical scrub. “Have a look at the veins now,” he yelled over the running water.

Feeling even more conspicuous I approached the table to observe the patient. Next moment, the sister moved in closer holding up an iodine soaked sponge to begin to prepare the leg for surgery. “Stand back, out the way”, she shouted.

As I walked in puffy faced and depleted, my spirits were lifted by an unexpected civil nod and half smile from the sister, and a comforting chuckle from the anaesthetist. “What next?” he asked. “Are you going to faint? Before you do wash your hands and hold this leg!”

I jumped backwards directly into her tray of sterile instruments and sent her trolley flying across the theatre. My horror and embarrassment quickly changed to dismay, as the crash of the falling metal instruments echoed through the theatre. I was bright red as everyone turned to look at me. Oh God!

The sister’s eyes, visible between her hat and mask, narrowed in my direction. Slowly she said, “You. Have. Contaminated. All. The. Instruments!”

I wanted to die right there and then. Suddenly the door flew open and a small fierce woman burst through the theatre doors. “Mrs Brown! Can we help you?” asked sister smiling weekly.

“Yes. Where are my shoes? My shoes are not where I left them in the changing room!” At this point I stepped out of Mrs Brown’s clogs and scuttled back to the changing room – before bursting into tears, the proper soggy tissue kind, accompanied by a wail or two.

I managed to pull myself together. First things first, I collected some clogs without any names on the bottom, and then strolled out of the changing room. “Take two!” I sighed.

As I walked in puffed faced and depleted, my spirits were lifted by an unexpected civil nod and half smile from the sister, and a comforting chuckle from the anaesthetist. “What next?” he asked. “Are you going to faint? Before you do wash your hands and hold this leg!”

I did exactly as he instructed without fainting, my enthusiasm returned; in fact my enthusiasm and excitement have never left. Dr Whymark is now a consultant anaesthetist in Scotland.

If you would like to write about your day, contact sara.dawson@medicalprotection.org
When travelling, a background in medicine can be useful and satisfying. I've learned from the great Kenyan runners and from rural communities in Mongolia and Indonesia what leads to high performance in this sport.

Namibia was a real opportunity to speak with local Topnaar Tribal Chiefs, the Mayor of Walvis Bay, healthcare workers, and the divisional minister for health about the speedy rise in life expectancy, and decreased family size in Namibia, and consider how this may be applicable elsewhere.

Members of the Royal College of Physicians and Surgeons of Glasgow had generously donated valuable medical equipment, and there was the opportunity for some medical training during the community aspect of our trip, and a chance to look at working together in the future to share knowledge and ideas.

So although this journey from ward to world removed me from my comfort zone, and much of the skin from my feet, it has left me with memories from one of the last great wildernesses on Earth and ideas for future ventures.

Dr Andrew Murray is a GP and Sports and Exercise Medicine Consultant, as well as a runner for Scotland, and Merrell UK. He is a Cruden Leadership Fellow with Royal College of Physicians and Surgeons of Glasgow.

Visit: www.docandrewmurray.com, follow @docandrewmurray. Andrew raises money for a few charities he is passionate about, with support from the Scottish Association of Mental Health. www.justgiving.com/runners4getactive.

FROM WARD TO WORLD

The Namibia desert between Luderwitz and Walvis Bay has the highest sand dunes and the lowest average precipitation in the world. There are no permanent inhabitants – it’s simply too hot.

So when expedition organiser David Scott asked me to assist with some community work, and complete a 500km run across it, this seemed like a strange request. However, the photos he shared convinced me instantly.

I got on a plane and flew across Africa to Namibia and my next challenge. It started well, but after two days and 125km carving a route through the dunes, I was in heavy trouble. Winter in Scotland does not prepare you for summer in the Namibian desert.

Every step up the dunes was a mission, as some were 300 metres high, I slid most of the way down while staring at the formidable “Devil’s workshop” looming ahead.

My hip flexor stung, and my left big toe was one big blister, but medicine teaches us not to panic and gives us a resilience to break down problems, so each day, along with fellow runner Donnie Campbell, we managed to run between 52 and 64km. We were breathless not only from the exertion, but from sights of sand blowing into the distance, huge shipwrecks miles inland, and wildlife that included hyenas, jackals and antelopes, and seal colonies and flamingos when nearer the coast.

As doctors, we are rarely in the true wilderness, but other than our superb support crew, we did not see another soul until we hit the edge of the desert at Walvis Bay. Running and climbing are generally solitary pursuits, but they help to recharge your mental batteries, keeping you fresh for work in the UK. I’ve always dedicated a couple of weeks a year to do different things and escape.

Last year Dr Andrew Murray ran up the UK’s ‘big ten’ in a day. Before that he ran from Scotland to the Sahara and ran seven ultra-marathons on seven continents in seven days. He’s just run across the Namibia desert – is there no stopping this GP adventurer?
RENEW ONLINE

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