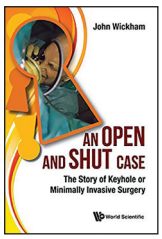
BOOK *review*



An open and shut case: the story of keyhole or minimally invasive surgery

John Wickham. World Scientific Europe, 2017, £28.80, ISBN: 1786341727

As an endourologist, it goes without saying that it was an honour to be invited to review John Wickham's book *An Open and Shut Case*, in which he tells the story of the transformation of urology from an open to an endoscopic specialty. It is particularly poignant as John passed away on 26 October, just a few days after this review was completed. The term 'paradigm shift' has often been applied to diagnostic tests or changes to established practice, but it is impossible to overemphasise the somewhat understated contribution that John Wickham has made to British and international urology. Indeed, for an exclusively endoluminal endourologist like me, the phrase 'we stand on the shoulders of giants' springs to mind. The fact that we can see further and treat more complex conditions with smaller incisions and faster recovery is a testament to Wickham's vision and his pivotal role in the development of minimally invasive surgery, both in the UK and worldwide.

The first part of his book chronicles Wickham's progression through medical school at St Bartholomew's, including an intercalated BSc at London University, where he became fascinated by the physiology of the nervous system, thereby stimulating his interest in a future career as a neurosurgeon. He began his pursuit of this as a houseman in 1955, returning as a house physician at Bart's to the Queen's physician, which included a spell working in urology for Mr Alec Badenoch. It was during this attachment that he witnessed a nephrolithotomy, and compared the precision of neurosurgery (where 'spilling 2–3ml of blood was almost a disaster') to the appearance of the kidney post-stone removal (which looked like a 'tied-up weekend sirloin'). His astonishment at so much tissue trauma to 'remove a few small pieces of calcified material' drove his quest to develop less invasive surgical techniques, and his concept of 'minimally invasive surgery' was born.

In the second half of the book, Wickham describes consultant life at the time, and the steps he took to reduce the trauma to patients undergoing renal stone surgery, first by changing to a lumbotomy incision instead of a conventional loin approach, and then to the development of percutaneous nephrolithotomy (PCNL) with Dr Mike Kellett, consultant radiologist. For the first PCNL performed in the UK, a track was made and a 1cm tube placed. 24 hours later, Wickham passed a cystoscope down the track and removed a stone in a basket – to a spontaneous round of applause from the theatre staff! With more confidence, the track was made as a primary procedure (rather than leaving it for two or three days to 'mature'), and post-operative 'tubeless' procedures were being performed even then. To put this into perspective, in 1979, when Wickham established percutaneous stone surgery in the UK, all other stone treatment was performed as open surgery. Nowadays, these figures are totally reversed, with less than 300 open stone cases performed in 2000–2001, reducing to 47 cases in 2009–2010, and just 30 procedures in 2014–2015.

This part of his career also saw Wickham lead a campaign for 'minimally invasive surgery' in general, arguing that it was not simply a smaller incision ('minimal access') but a less traumatic operation altogether. But this is not just a book about Wickham's life as a surgical innovator – he also discusses coding systems and instrument design (including lasers for stone surgery and a 'probot' for transurethral resection of the prostate (TURP), as well as talking medical politics and ethics, including reflections on overbooked outpatient clinics and some of the challenges and frustrations of a life in the NHS. Interestingly, for someone who embraced technology and innovation, he is disparaging of the computerised consultation, recommending a return to the 'surgical firm' and the benefits of continuity of care from a senior and experienced physician. He dismisses the notion that surgical training can be likened to that of an airline pilot, so often paralleled in human factors analysis of surgical performance.

Having met John Wickham a few times (I was at the London Clinic when he performed his very last operation in 1998), and being not just a minimally invasive surgeon but a pure endoluminal endourologist, I like to think he would have been pleased to come to Westmoreland Street Hospital (the Urology Hospital of University College Hospital, into which St Paul's and The Middlesex have metamorphosed) and see how closely stone surgery today mirrors the vision he described for it three decades ago.

I am sure urologists of all types will enjoy this book, as will anyone with an interest in technology or how to transform a clinical service. That it is told by the man who conceived and enacted it makes it even more powerful – an inspirational tale of the pursuit of excellence and a fitting memorial for a great man and a genuine pioneer.

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