

Winter Book Review

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Diagnosis: Dispatches from the Frontlines of Medical Mysteries by Lisa Sanders

(Icon Books, £17.99)

Consider Tinel's sign. It is one of those physical examinations that every medical student encounters, memorises, and perhaps uses in their final exam when confronted by a patient with hand pain. If you can reproduce the pain in the thumb, index and middle fingers by tapping the wrist over the median nerve – well then, Tinel's sign is positive, the diagnosis is carpal tunnel syndrome, and you're home and dry. But, as Dr Lisa Sanders reminds us, studies have shown that Tinel's sign is neither particularly sensitive nor specific as a test for carpal tunnel syndrome. It is a canard, a false friend, and something of a medical mystery itself. How does such a flawed test remain in circulation when better alternatives exist? What other areas of received medical wisdom should come under scrutiny?

Sanders is a thoughtful and provocative medical educator on the faculty of Yale medical school. Her curriculum vitae includes the glamorous role of adviser on the hospital drama, *House*. It is the one with Hugh Laurie as the limping physician who has the ability to solve a diagnostic conundrum with a maximum of self-aggrandising chutzpah. Laurie croaks his way around the American accent in an off-putting manner, but otherwise the show is engaging, and it continues the noble tradition of repulsive fictional doctors. Sanders accepts that a real-world Dr Gregory House would be a lousy doctor. She has little loyalty to her creation, acknowledging that House would arrive at his astonishing diagnoses with much less fuss if he refrained from treating his patients as a huddled, deluded mass of liars and ingrates. Television, it seems, just adores a misanthrope.

Many of the weaknesses of modern medicine,

Sanders claims in *Diagnosis*, can be attributed to a deterioration in the clinical skills of history taking and examination. Modern imaging advances, and the multitude of diagnostic tests available in hospitals today, have blunted the ability of doctors to rely on their own sensory and deductive powers. She argues that the profession is at risk of leaving behind a crucial part of its heritage. Drawing on her own clinical and teaching experiences, the book is a mixture of polemic, anecdote, literature review and good sound uncommon sense.

The most inviting parts of the book are the case studies. The format will be familiar to *House* fans. The game is to try to work out the diagnosis ahead of the curve. The examples are obscure enough to provide a challenge for the informed reader, but also convincing as real encounters, and would certainly not be incomprehensible for the layperson. The stories of paralysed hikers, spotty Vietnam veterans and arthritic prostitutes illustrate the skills that are needed to cope with real patients. The real world abounds in diseases that do not read textbooks, and have no idea how they should present themselves in order to make the doctor's life easy.

Diagnosis is a study of failures: individual errors, institutional snafus, and grimly avoidable horrors. It is also a tribute to the hard lessons that have been learnt by these mistakes. Medicine has had no golden age; certainly, the times when these basic clinical skills were developed were far less enlightened than the strip-lit present. This should not, though, mean wholesale abandonment of hard-won wisdom. Sanders draws attention to a paradox. The medical profession is inherently conservative. The inertia of the establishment is summed up in the quoted finding that it takes seventeen years for an intervention (such as giving aspirin after a myocardial infarction) to become common practice among even fifty per cent of doctors. In the case of the fundamental

clinical skills, however, there appears to have been an unseemly rush to down tools in favour of the blandishments of technology.

How relevant is this to British doctors? Medical schools in Britain might claim with some justification that the stable door has been bolted with the horse securely back in his loose box. The reworking of curricula over the past couple of decades has seen a swing back towards effective teaching of traditional clinical skills. Patient contact is introduced early on in training, assessment of history-taking techniques is more formal and more rigorous, and adjuncts to learning such as Harvey the heart-sound simulator are widely available. Evidence does suggest that Sanders is documenting a crisis that has already been acknowledged and is in the process of being averted. This does not significantly detract from the force of her arguments, since every generation of new doctors is going to face similar pressures. Money and vested interests further muddy the situation, especially in America. The sum of medical knowledge is vast; nostalgia for the old ways of doing things is generally unhelpful (*viz.* blood letting, trepanning); new exciting diagnostic techniques will always appeal, especially when alluringly packaged by marketing men. The clinical fundamentals are worth making an exception for, but they will continue to need good advocates.

Sanders makes her case in *Diagnosis* very effectively. There are fascinating diversions, including discussions of the political intrigues behind the management of 'chronic Lyme's disease', and the ongoing tribulations of the teams trying to programme a computer that can make accurate diagnoses. It is clear that she would be a wonderful teacher in person. Dr House typifies the failings she laments, but he compensates by having a gigahertz brain. For the rest of us, her advice is to cleave to the basics. The writing style is engaging without

being simplistic, and her honesty about her own struggles and professional hiccups is very refreshing. Junior doctors should read this, and then go back to the wards with eyes and ears wide open.