

Case reports: here or to go?

It is a truism to say that medicine is a subject in which rarity is common. Anecdotal stories of the bizarre, the unusual, of extraordinary coincidences that all of us witness during our practising lives fuel idle conversations in the coffee room but there is more to such stories than mere repartee. Such 'case reports' were the earliest form of medical reporting and yet they still reserve a place in the medical literature today. But what is their value? Are they really worthy of record or are they anachronistic in today's world of clinical trials and consensus statements? By definition case reports do not fit into the norm or the predictable, they do not obey established rules of behaviour and so they test our preconceived ideas about how clinical events proceed and are linked. This is their strength, not their shortcoming.

In this issue there are four case reports relating to abdominal surgery. These fall into three categories. Two report rare events presenting like common conditions – small bowel perforation mimicking appendicitis (p. 436) and hernial strangulation precipitated by intra-abdominal peritonitis (p. 430). One documents the rare complication of a common condition – here splenic rupture resulting from pancreatitis (p. 432). The fourth paper presents the serendipitous diagnosis of a common condition – appendicitis (p. 434).

The first three are clinical alerts – prompting us to be aware of unexpected clinical situations. Thus when next approaching common surgical scenarios we can have, at the back of our minds, an ever wider differential of alternative explanations or important warnings. In each of these three cases, awareness of the possibility of a rare event has enabled the patient to receive appropriate, and possibly life-saving, treatment. The fourth report offers a new angle on an old disease – a diagnostic aid. All four reports are 'tips of the trade' – they enable all of us to benefit from the experience of a few.

Other categories of case reports are those that document rare events, com-

plications or drug reactions; they may be the first to document new syndromes or diseases; they may simply tell a story. To deserve publication they should be novel, informative and illuminate the process of disease. Many case reports are enhanced by setting the case presented within the wider context of similar cases, often with a brief review of the literature.

The case report may be the first opportunity for a junior doctor to write a paper. Trainees move jobs so rapidly that it is rare for anyone not involved in full time research to be the first author on an original research study, but juniors are as likely as anyone to witness extraordinary events potentially worthy of a case publication. The benefit to the author of the discipline involved in writing and submitting a paper is outweighed only by the sense of pride in seeing his/her work in print for the first time.

PATIENTS ARE ONLY HUMAN

Much weight today is placed on evidence – on evidence-based practice and on randomized trials, meta-analysis and multicentre studies. We try to make medicine a science – we formulate hypotheses and test them in large scale studies. Patients are categorized and standardized as much as possible so the results can be analysed statistically and given a significance score. Here the thinking is down straight, logical lines.

Humans, however, are maverick, unreliable and infinitely variable. The scope of medical conditions is constantly changing as are the treatments

available. The case report capitalizes on these very idiosyncrasies, involving lateral thinking, coincidence and chance.

The 'evidence' base of a case report is weak yet the message may be powerful. For example, in January 2001 a 3-year-old girl died when an anaesthetist accidentally administered pure nitrous oxide without oxygen. This single case reached the national press (Pook, 2002) and stimulated an overhaul of anaesthetic machines, all of which have had to be replaced or fitted with safety features preventing administration of nitrous oxide without oxygen. It also highlights another facet – the value of the case report is in its dissemination. Access to its message is crucial – hence publication.

In the internet age of the information highway, the case report literature serves as a repository which is easily accessed using the medical literature search engines. One could argue that case reports are of even greater potential benefit now because of their ever-increasing accessibility. But in a way that misses the point of the case report. To search for cases assumes one knows what to search for, whereas the true value of the case report is in its unexpected nature – as the four reports in this issue demonstrate amply. **HM**

Nigel R Hall

Consultant Colorectal and General Surgeon

Department of Surgery

Addenbrooke's NHS Trust

Cambridge CB2 2QQ

Pook S (2002) Doctor cries as he says sorry for girl's death. *Daily Telegraph* 12 April: 7

KEY POINTS

- Case reports document rare events that are not open to trials or evidence-based research.
- They capitalize on the idiosyncrasies of humans and their infinitely variable response to disease and treatment.
- Publishing case reports is vital to disseminate the experience of a few to all practising clinicians.
- Submitting a case report is a good introduction for young doctors to publishing their work and may motivate them further to do more research.