

United Kingdom, Black and colleagues (p 1478) found that cancer and surgery were better covered than other specialties, and databases varied greatly in size, scope, geographical areas covered, and quality. Audit and research potential is not fully used, say the authors; considerable scope for improvements exists, which could be facilitated by a national support unit.

Treat minor burns effectively

Most minor burns can be safely managed in primary

care. In the third article of our ABC of burns (p 1487), Hudspeth and Rayatt give some important tips on how to treat patients with minor burns. The first aid given can influence the final cosmetic outcome: stopping the burning process, prompt cooling with tepid tap water, covering the burn (cling film is ideal), and keeping the patient warm is paramount. Burns should be kept clean, but routine use of antibiotics should be discouraged, say the authors. If the burns have not healed within two weeks, refer the patients to a burn surgeon.

POEM*

Progesterone IUD is effective for menorrhagia

Question Which is preferred in the treatment of menorrhagia: hysterectomy or the levonorgestrel-releasing intrauterine system?

Synopsis Menorrhagia is a significant worldwide health problem and is the major presenting symptom for women who undergo hysterectomy. The levonorgestrel-releasing intrauterine system (LNG-IUS) is an intrauterine system that slowly releases a steady amount of levonorgestrel. It is currently being used in Finland for treatment of menorrhagia, but is approved in the United States only as a contraceptive device. A total of 236 Finnish women (mean age 43 years) with menorrhagia were randomly assigned (concealed allocation assignment) to treatment with this system or hysterectomy. Follow up was monitored for 96% of the patients for five years. Outcomes were self assessed by patients not blinded to treatment assignment using prevalidated health questionnaires and surveys. With intention to treat analysis, after five years no significant differences in health outcomes or overall satisfaction with care were reported by the two groups. Although 42% of women initially assigned to the LNG-IUS group eventually underwent hysterectomy, both the direct and indirect costs were lower for patients assigned to the LNG-IUS group than for those in the assigned hysterectomy group (\$2817 v \$4660 per participant). Since the introduction of LNG-IUS in Finland in 1998, hysterectomy rates have fallen by 13%.

Bottom line Women with menorrhagia often require hysterectomy for symptom relief and health satisfaction. The levonorgestrel releasing intrauterine system resulted in similar outcomes for many women and is more cost effective as initial treatment.

Level of evidence 1b (see www.infoPOEMs.com/levels.html). Individual randomised controlled trials (with a wide confidence interval).

Hurskainen R, Teperi J, Rissanen P, et al. Clinical outcomes and costs with the levonorgestrel-releasing intrauterine system or hysterectomy for treatment of menorrhagia. Randomized trial 5-year follow-up. *JAMA* 2004;291:1456-63.

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* Patient-Oriented Evidence that Matters. See editorial (*BMJ* 2002;325:983)

Editor's choice

Doctors are not scientists

Some doctors are scientists—just as some politicians are scientists—but most are not. As medical students they were filled full with information on biochemistry, anatomy, physiology, and other sciences, but information does not a scientist make—otherwise, you could become a scientist by watching the Discovery channel. A scientist is somebody who constantly questions, generates falsifiable hypotheses, and collects data from well designed experiments—the kind of people who brush their teeth on only one side of their mouth to see whether brushing your teeth has any benefit. Most doctors follow familiar patterns and rules, often improvising around those rules. In their methods of working they are more like jazz musicians than scientists.

Questioning whether doctors are scientists may seem outrageous, but most doctors know that they are not scientists. I once asked a room of perhaps 150 medically trained educators which of them thought of themselves as scientists. About five put up their hands.

If doctors are not scientists then it seems odd to supply them, as medical journals do, with a steady stream of original scientific studies. Teachers and social workers are not sent original research. Nurses are sent some, but are they simply aping the illogical ways of doctors?

The inevitable consequence is that most readers of medical journals don't read the original articles. They may scan the abstract, but it's the rarest of beasts who reads an article from beginning to end, critically appraising it as he or she goes. Indeed, most doctors are incapable of critically appraising an article. They have never been trained to do so. Instead, they must accept the judgment of the editorial team and its peer reviewers—until one of the rare beasts writes in and points out that a study is scientifically nonsensical.

Sometimes readers will alight on an article as a bee alights on a flower to suck a little honey. They will alight, I suspect, for reasons that are more personal than scientific. I am interested in the study showing a steady rise in hospital admissions for acute pancreatitis from 1963 to 1998 (p 1466) because my brother had pancreatitis—maybe, indeed, that link had something to do with the study making it into the journal just as it's been suggested that the *BMJ* publishes on toenail fungus because so many of the editorial team suffer from it. The authors note that the prognosis of acute pancreatitis is poor and that mortality after admission has not fallen since the 1970s—reflecting the absence of innovations in treatment.

I am attracted as well to the study on whether the uncertainty principle is violated in clinical trials (p 1463). The principle says that you shouldn't conduct a trial if you think that one treatment is likely to be better than another. The study looked to see if trials more often favoured the experimental treatment. I guessed they would—and, indeed, they did. The authors, however, judge that the trials do satisfy the uncertainty principle. I'm unconvinced.

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