Use of patient information leaflets in surgery

Sir,

Mr Goldie (p. 822) has created the largest set of high quality information leaflets for orthopaedic patients. They form part of the Satis-Fax family of computer-based leaflets written also by consultants in ear, nose and throat surgery, general surgery and gynaecology. They cover about half of all operations. They are widely used in the UK and abroad by consultants, who freely customize the information.

The content of the leaflets has to be good enough to reassure today's patients, who are often misinformed and confused by poor quality information from elsewhere.

The electronic basis of the leaflets gives many advantages over traditional printing. The leaflets are easy to maintain and update, countering the inevitable decay of information with the passage of time. Adding diagrams and fund raising sections is straightforward. The information can be distributed to local GPs on floppy disks or on the Internet. Shortened versions have been released to the public on the Internet (www.SurgeryDoor.com).

We have introduced similar large amounts of expert information into the operating theatre in the form of customisable operative scripts. They contain virtually all the information required to perform an operation in a simple structure called a pantogen (available from Advanced Surgical Education Systems, 7 Dover Road, Warrington WA4 1NB Tel/fax +44 (0)1925 232932, e-mail: peter@dox2b.com, website: www.dox2b.com). The aim is to accelerate surgical training and to reduce surgical errors.

These are examples of the exciting applications of information technology, to benefit patient and clinician alike.

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Management of acute heart failure

Sir,

The fact that chest radiography merited only a passing comment in the review by Drs Murdoch and McMurray (Vol 61(10), 2000, p. 725) amounts almost to a dismissal of a diagnostic modality which rivals even echocardiography, in terms of availability, relevance to acute heart failure, and interobserver diagnostic validity.

Unlike echocardiography (which received more coverage in the article), chest X-ray is readily available in the emergency room context, when junior doctors need most urgently to make the distinction between left ventricular failure and other causes of breathlessness such as acute asthma, pulmonary embolism, and bronchopneumonia, all of which share one or more of clinical stigmata such as wheezing and basal crackles.

Even portable chest radiography has been shown to be diagnostically robust, as in a study showing up to 94% interobserver agreement in the comparison between clinical *vs* radiographic severity of left ventricular failure (McHugh et al, 1972). In the context of radiographic stigmata of chronic left ventricular failure interobserver agreement for recognition of upper lobe diversion amounts to 74%, and, for recognition of interstitial oedema, concordance is 95% (Butman et al, 1993).

In this context, positive predictive value of these two parameters amounts to 89% and 83% respectively (Butman et al, 1993). Echocardiography is less readily available, and even skilled operators may fail to obtain technically satisfactory images in as many as 17–26% of subjects (Breekland et al, 1997; Parisi et al, 1981). Even when images are satisfactory, interobserver variability for obtaining the left ventricular ejection fraction can be anything from 14.4–27.37% (Parsons, 1997), the resulting diagnostic confusion being compounded by a multiplicity of formulae for deriving this parameter (Parsons, 1997; Stamm et al, 1982).

Finally, although excellent in making the distinction between systolic failure *vs* left ventricular failure with preserved systolic function, echocardiography is more limited than chest X-ray in its contribution to the differential diagnosis of the acute breathlessness syndrome. It cannot distinguish between some of its common causes such bronchopneumonia, acute asthma, and pulmonary embolism, the last two being characterized by a severity in symptomatology which is disproportionate to the burden of radiographic stigmata. This is quite unlike the situation in acute left ventricular failure, where a good correlation has documented between clinical *vs* radiographic severity (McHugh et al, 1972).

What this review has unwittingly highlighted is the need for greater emphasis, in the undergraduate curriculum, as well as in continuing medical education, on acquisition of skills in recognition and interpretation of the radiographic stigmata of left ventricular failure and other common causes of the acute breathlessness syndrome.

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