only when there is no appropriate treatment for comparison. Invasive placebo treatment is unlikely ever to be justified.

CONCLUSIONS

There is no one best design for all clinical trials. The choice for a specific trial must depend on the seriousness of the condition being treated, the nature of the treatments, the response time, the measures of outcome, and so on. The main ethical problem is balancing the interests of the individuals in the study with those of the much larger number who may benefit in the long term. But it is also vital that the research should provide useful results, and this may often be achieved best by a randomised study (double-blind if possible). If it is thought likely that highly favourable early results or a high incidence of side effects would argue in favour of premature termination of the study, then these considerations may be built in, using a sequential design.

The ethical difficulties associated with the widespread use of a new treatment without a trial are far greater than those associated with the trial itself. The importance of good design, however, is reflected in the many examples of conflicting results that may be found in series of case-control studies of the same topic.¹⁶ As a notable example, after 32 studies over 25 years there is still no consensus on the efficacy of anticoagulants following myocardial infarction.¹¹

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*This is the second in a series of eight articles.
No reprints will be available from the author.*

Lesson of the Week

Endoscopic assessment of oesophageal disease

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The widespread availability of fiberoptic endoscopy has led to significant changes in the investigation of the upper gastrointestinal tract. We have noted in particular a tendency for doctors to dispense with a radiological examination completely and rely solely on endoscopic findings for both the diagnosis and the management of oesophageal disorders. This has led to several serious errors in the treatment of patients with oesophageal disease, and we describe three cases. We want to emphasise that radiological contrast examination must precede endoscopy in the investigation of cases of oesophageal disease if similar errors are to be avoided.

Case reports

Case 1—A 76-year-old man presented with a five-month history of progressive dysphagia and a history of heartburn.

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Endoscopic findings alone do not tell the whole story in the investigation of oesophageal disease.

No barium studies were done, but endoscopy showed a stricture of the middle third of the oesophagus. The cause could not be determined, but when dilatation was attempted (Eder-Puestow technique) the oesophagus was perforated. The patient was transferred to our unit and the underlying pathology was unknown.

A Gastrografin swallow failed to outline the oesophagus, all the contrast medium having passed directly into the pleural cavity. Because of the possibility of a benign stricture thoracotomy was performed, but an unresectable carcinoma of the middle third of the oesophagus was discovered. Despite palliative intubation the patient died. Had a radiological diagnosis been made on this patient first a useless and painful thoracotomy could have been avoided.

Case 2—A woman aged 68 presented with retrosternal discomfort and vomiting. Her general practitioner had requested that barium studies be arranged. Instead, endoscopy was performed and a possible paraoesophageal hernia diagnosed.

Medical treatment was started without further investigation. Three months later her symptoms had progressively worsened, and she was referred to our clinic. Barium studies showed a massive irreducible paraoesophageal hernia. Five days later she was admitted as an emergency after inhaling gastric contents, which led to her death four days later. The incomplete initial investigation of this patient resulted in complacency in management, and the fatal complications developed before surgical treatment could be started.

Case 3—A 60-year-old Asian man had swallowed a dental plate with one attached tooth. Removal was attempted 24 hours later by rigid oesophagoscopy without prior barium studies. This resulted in a massive haemorrhage, and the patient was transferred to us as an emergency. A barium swallow showed that the plate was lying outside the oesophagus. Thoracotomy showed that it was penetrating the descending thoracic aorta, but extraction of the plate caused uncontrollable haemorrhage and the patient died in the operating room. A radiological examination using contrast media before endoscopy might have shown (a) that the plate should not have been removed by endoscopy, or (b) that it had already penetrated the oesophagus—in which case removal by endoscopy would have been contra-

indicated and the surgeon exonerated from any medicolegal responsibility for the perforation.

Comment

In oesophageal disease contrast radiology gives important information that cannot be obtained from endoscopy. The two investigations are therefore complementary and not mutually exclusive, and assessment is not complete until both have been performed. Although there may be logistic difficulties in obtaining barium studies, this must not alter the principle that adequate radiological studies must be obtained before performing endoscopy, whether with the rigid or the flexible endoscope. Regardless of what the practice is in investigating the remainder of the gastrointestinal tract the presence or possibility of oesophageal pathology requires that radiological examination is carried out before endoscopy or similar cases will be seen in increasing numbers.

Requests for reprints should be sent to HRM.

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Reading for Pleasure

Another sort of reading

CHARLES LANGMAID

In all the contributions to this series it has been tacitly assumed that the sole meaning of reading is scanning a page of printed words. Presumably this could include modern Greek, the Cyrillic script of the Slavonic peoples, or even the complicated ideograms of China or Japan. There is, however, another much more easily available and indeed easily achieved activity, and that is reading music. This constitutes a regular activity of a quite considerable number of the medical profession.

Sight-reading

I first started to master the intricacies of our slightly irrational system of musical notation at the age of 8, and although "reading" applies to the general activity of interpreting the printed symbols on the page its meaning is usually extended and is understood to refer to "sight-reading," which is the skilful reading of a piece of music not previously seen, or at least not practised. My teacher, a church organist, fortunately laid great emphasis on the importance of being a good sight-reader, and I have never ceased to be grateful to him for giving me the firm foundation on which to build a full and fascinating musical life. I was regularly given pieces to play "at sight," and in addition we would, from time to time, play piano duets together. I was thus encouraged to have a considerable repertoire, with broad horizons, rather than to concentrate on a handful of pieces for

an examination. The importance of such sight reading was emphasised by Benjamin Lee.¹

I have often been asked about this gift and whether it runs in the family. Tobias Matthay, the distinguished teacher of Myra Hess and Irene Scharrer, is reported to have said that "piano-playing is no more a gift than is the power of articulate speech." To balance the argument, however, one should perhaps also quote Rubinstein's remark that, "Piano playing is a movement of the fingers; piano performance is a function of the soul."

In my youth music was less readily available on records and, living as I did in Cardiff, the opportunities for hearing live music were distinctly limited. I first became really familiar with Beethoven's Fifth, Schubert's Unfinished, and Tchaikovsky's fifth and sixth symphonies through playing them as piano arrangements. Later I also came to know many works by playing them as piano duets—years before I heard them as live performances. These included symphonies by Haydn, Mozart, and Beethoven, as well as the orchestral suites of Bach and the string quintets of Mozart. It was not only such arrangements for four hands that gave pleasure, however, but also the wealth of original music written for that medium—delights such as Dvorak's Slavonic dances, Brahms's Hungarian dances, and many works by Schubert, but also such original works as Ravel's *Mother Goose Suite*, Debussy's *Petite Suite*, Fauré's *Dolly Suite*, and William Walton's *Duets for Children*. Interestingly, the reverse process applied here, and all these works were subsequently orchestrated.

While still living at home I bought my own piano and, with two instruments in one room, explored works for two pianos, both original and arrangements. Also during the war I occasionally played, with three kindred spirits, eight hands on two pianos. The music available was mainly arrangements of

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