can hardly have been present in so many persons in good general health, particularly as they also denied rectal bleeding. Moreover, these uncomplaining sufferers very often admitted to other symptoms characteristic of the spastic-colon type of irritable-bowel syndrome, such as abdominal distension, a feeling of incomplete evacuation, and a change in bowel habit when an episode of pain began. In the 7\% of subjects whose pains were not relieved by defaecation they were often related to food. Possibly they were due to “functional dyspepsia” or even undiagnosed peptic ulcers.

The frequency of constipation in the British population has long been common knowledge and is to non-sufferers an occasion for mirth. In the Bristol study painless constipation (defined as frequent strain at stool) was admitted by 6\% of those questioned and was clearly related to age. Less predictably, a further 4\% admitted to painless diarrhoea, which may be a variant of the irritable-bowel syndrome.

Finally, no fewer than 14\% said that they suffered from proctalgia fugax. Proctalgia fugax can probably be caused by spasm in the rectosigmoid region, and no less than one-third of its victims also suffered from recurrent abdominal pain of colon-spasm type.

Altogether nearly one-third of the 301 persons interviewed admitted to recognisable functional gut syndromes. Perhaps the most striking statistic to emerge from these studies, however, is that only one-quarter of these had consulted a doctor about their gastrointestinal tract in the past year. It seems that the irritable-bowel syndrome must join hypertension, gall stones, and many other disorders of our society as an iceberg disease.

Doctors may count themselves lucky that so many potential patients prefer to suffer in silence, but they should also ponder the implications of these findings. For a start, they challenge the popular medical belief that the irritable-bowel syndrome is an intestinal response to neurotic anxiety. This is hard to reconcile with the finding that most sufferers do not bother their doctors. Perhaps those who do seek medical advice are the ones with the most severe symptoms, but it is just as likely that they are the ones most worried by their symptoms. This would explain the large proportion of anxious patients with the irritable-bowel syndrome. The first line of treatment is explanation and reassurance; sometimes that is all that is required.

That leaves perhaps the most difficult but also the most intriguing question. Why do so many “normal” people have symptoms of dysfunction of the gut and, especially, of the colon. Advocates of the fibre hypothesis have an answer ready made, but they need to prove that the irritable-bowel syndrome is less common in communities eating a high-fibre diet. Certainly, bran and other bulking agents help in many cases, but not all, and in this condition there is a large placebo effect with any treatment.

Perhaps food allergy or other more subtle effects of diet play some part and psychological factors cannot be discounted altogether. After all, in many ways the irritable-bowel syndrome is analogous to migraine: it may be just as disabling, and both diseases are easy to diagnose if, and only if, a careful history is taken.

Thomas Lewis and clinical research

On his tombstone Sir Thomas Lewis (1881-1945) is described as “physician and scientist,” and, indeed, one of his beliefs was that clinical science should be differentiated from the practice of medicine. While this philosophical concept is still debated there can be no argument about his contributions to cardiology in particular and to medicine in general.

Having studied in Cardiff and qualified from University College Hospital, London, in 1905, Lewis plunged into research as well as clinical work. He was largely responsible for introducing the electrocardiograph into clinical use, and it is a daunting thought that Lewis could master this tool so that within a decade he had categorised the features of most cardiac arrhythmias. Furthermore, within five years of qualifying he had established Heart, forerunner of Clinical Science, which he later handed over to the Medical Research Society. Indeed, this society, the forum where so many young research workers present their work, was his creation, and as one of the founder members of the Cardiac Club in 1922 he helped establish its successor, the British Cardiac Society.

Lewis’s contributions were by no means confined to electrocardiography and the study of cardiac rhythms, or indeed other aspects of cardiology. In the 1920s and 1930s he turned his attention to the peripheral circulation and to the mechanisms of pain and wrote extensively on the philosophy of clinical science. Nevertheless, his best-known contributions were to scientific cardiology. He had wide influence abroad, especially in the United States; one of his American disciples, the late Samuel Levine, endowed the Thomas Lewis Lecture of the British Cardiac Society in his memory.

Lewis was a vigorous and original worker whose writings still repay rereading. On 24 April a symposium at the Wellcome Institute for the History of Medicine was devoted to him and his work, and an associated exhibition remains open there until 29 May. He died in 1945, 18 years after the first symptoms of coronary heart disease appeared. Lewis had a long association with University College Hospital and the Medical Research Council and is still personally remembered by many, but his influence is also maintained by several of his books: all who work on cardiac arrhythmias recognise the fundamental importance of The Mechanism and Graphic Registration of the Heart Beat, published in 1925.\(^1\) Not only was he an original medical scientist whose practical contributions remain of value: today’s clinical scientist owes much to the recognition that he receives to the impetus of Sir Thomas Lewis.

\(^1\) Lewis T. The mechanism and graphic registration of the heart beat. 3rd ed. London: Shaw and Sons, 1925.

Regular Review

New uncertainties in prenatal screening for neural tube defect

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Two years ago a working group under the chairmanship of Sir Douglas Black\(^2\) advised on “what guidance might be given to health authorities on the introduction into routine antenatal care of a service to detect neural tube defects.” Its report concentrated on one method—screening by measurement of alphafetoprotein in the maternal serum. In retrospect, the report may be seen to have marked the end of a stage in the development of screening for neural tube defect, since it did not advocate immediate provision for all pregnancies and it preceded several important developments. The time is now ripe for a re-evaluation of procedures for the detection and prevention of fetal neural tube defect.

To obstetricians the most impressive new factor is the improved resolving power of diagnostic ultrasound.\(^3\)\(^4\) Screening by ultrasound has become a serious alternative to screening by maternal alphafetoprotein. Examination of a fetus by high-resolution ultrasound has helped resolve diagnostic uncertainties.