Splanchnic analgesia—placing a block across the path of impulses passing from the viscera via the coeliac ganglia and the great splanchnic nerves to the central nervous system—has proved of great service in severe operations on the upper abdomen. It is mostly employed in combination with light general anaesthesia, or with basal narcosis, or a field-block of the abdominal wall. This form of anaesthesia has certainly made possible severe and prolonged operations on subjects who could not possibly have survived them otherwise.

Therapeutic Use of Anaesthetics

Several anaesthetics have been of service in a manner entirely different from that for which they were designed. Avertin has been invaluable in the treatment of tetanus, and has been shown to be without deleterious or toxic effect though injected on a large number of occasions at short intervals of time. Evipan has been given with success in the control of delirium tremens, and the barbiturates generally have been found of help in the treatment of mental cases, especially when prolonged narcosis is desired. Finally, it has been maintained that the good results sometimes following the mere opening of the abdomen—for example, for tuberculous peritonitis—are to be attributed not to the operation but to the anaesthetic inhaled, and it has been suggested that repeated inhalations without operation would be a beneficial form of treatment.

No survey of advances in anaesthetics should conclude without allusion to the improvements which have taken place within the last few years in the education and the professional status of anaesthetists. This is well illustrated by the recent institution of a diploma in the subject by the Royal Colleges of Physicians and of Surgeons, this diploma being to a large extent due to the instigation of the Association of Anaesthetists of Great Britain and Ireland, the existence of which body is itself an evidence of the increasing importance which is being given to the practice of anaesthetics as a specialty. Lastly, the first Chair of Anaesthetics in Great Britain has recently been instituted in the University of Oxford through the munificence of Lord Nuffield.

R. D. Evans (*Amer. J. Roentgen.*, March, 1937, p. 368) has found that about 45 per cent. of the total amount of radium stored in the skeleton in cases of chronic radium poisoning gives rise to radon in the expired breath. The amount of radon, and consequently of the radium producing it, can be determined by electrical tests on the expired air. The rest of the radium in the body is determined by the gamma rays produced by its decay product, radium C. Very sensitive quantum-counters, capable of detecting radiation from less than a millionth of a gramme of radium, permit more rapid determination of the radium C gamma rays from a living person than do the usual electrosopes. The author then describes a general method for estimating the extent to which a gamma ray gives off substance in a closed and inaccessible container. The quantum-counters are directly calibrated for rapid measurements of radium C. The rate of the loss of radium by the patient is directly measured by radium analyses of the faeces and urine. In chronic cases 0.005 per cent. a day is eliminated, 91 per cent. of this in the faeces and 9 per cent. in the urine. The mobilization of radium within the body is studied by radon analysis of specimens of alveolar air. Simple gamma-ray examinations of patients will detect chronic radium poisoning five or ten years before any clinical symptoms appear.

RHEUMATIC HEART DISEASE IN THE COUNTY BOROUGH OF DEWSBURY

BY

A. T. ELDER, M.D., D.P.H.

Assistant Medical Officer of Health

The following statistics obtained at a recent survey of school children known to have suffered from cardiac disease may prove of interest. It should be pointed out that the figures refer to the numbers of children whose cardiac debility was of such a degree as to interfere with their normal mode of living to some extent, and is in no way intended to be a reflex of the total incidence of rheumatic disease in Dewsbury. These cases are listed in the school clinic records as heart cases to be examined for the purpose of determining whether they were suitable for attendance at the public elementary school, and whether or not they had recovered sufficiently to lead a normal existence.

The first table shows the classification of these cases according to fitness.

TABLE I

	Males	Females	Total
Number of children fit for public elementary school and for some exercises, but recommended for further observation	4	—	4
Number fit for P.E.S. but excluded from games and exercises	10	6	16
Fit for P.E.S. half-days. Excluded games	—	1	1
Unfit for P.E.S.	1	4	5
At open-air school	1	2	3
			25

Table II shows the number of cases suffering from heart disease directly attributable to rheumatism in some form or other. The other heart cases attributable to such diseases as pneumonia, diphtheria, etc., are classified together as non-rheumatic.

TABLE II

	Males	Females	Total
Heart debility due to rheumatism	12	8	20
Heart debility not due to rheumatism	5	4	9
			29

It is noted, then, that the majority of cases of heart debility are directly the result of rheumatic disease, in the proportion of two to one. In twenty-six of the cases the tonsils were found to be present and enlarged and ragged, or cryptic or otherwise unhealthy. It was ascertained whether or not each case had had the tonsils removed prior, or subsequent, to the onset of heart-disease, and the following table is instructive:

TABLE III

	No. of Cases
Tonsils present on examination	26
Tonsils removed	3
Tonsils removed prior to onset of disease	Nil

It will thus be seen that all of these cases had their tonsils intact before the onset of heart disease.

It was next decided to investigate the incidence of these heart cases according to the district in which the patient lived, and it was found that twenty-one lived in the town centre and eight in the outlying districts. Of the twenty-one cases in the town centre fourteen were of rheumatic origin. An analysis of these fourteen cases showed that thirteen of them belonged to the most congested part of the town centre.

The cases were then analysed with a view to discovering what schools contributed most cases, and it was found that seven of these thirteen cases came from the two schools serving the most poverty-stricken and congested area of the town. Another interesting point made out was that only four out of the total of twenty-nine cases lived in the end of the town where are housed almost all the mills, and which might be regarded as the most smoke-laden

part of the town. Table IV shows the incidence of these cases according to the age groups 5 to 9 years and 9 to 13.

TABLE IV. INCIDENCE ACCORDING TO AGE GROUPS

(1) Of all Heart Cases							Males	Females	Total
Age Groups :									
5-9 years	..	..	..	..	..	..	4	5	9
9-13 "	..	..	..	..	..	..	11	9	20
									29
(2) Of Rheumatic Heart Cases							Males	Females	Total
Age Groups :									
5-9 years	..	..	..	..	..	..	3	3	6
9-13 "	..	..	..	..	..	..	8	6	14
									20

It will be seen from Table IV that six patients suffered from heart trouble in the years immediately following admission to school, and of the fourteen remaining cases it was found that the majority of them gave a history dating back to the age group of 5 to 9 years, and seven of them could be traced back to age 5 or 6.

Commentary

These few results tend to substantiate the theory that rheumatic heart disease in children is a result of infection of the tonsils and that such infection occurs early in the child's school life.

In the majority of cases the rheumatic manifestations were not dramatic, and consisted mainly of indefinite pains of the limbs and joints rather than an obvious attack of rheumatic fever. Of the twenty cases of rheumatic heart disease only five gave a history of rheumatic fever or chorea.

It would appear that the most important examination from the child's point of view is not the one subsequent to school attendance, but one which should be made during the "toddler" stage. Thus an argument can be made out for the routine medical inspection of children attending nursery schools, as it is here that the full effect of preventive removal of tonsils can be gained. The findings certainly suggest this interesting conclusion, although the limited nature of the survey will not allow of a dogmatic statement.

It has been my experience that in too many instances tonsils have been removed merely because they were enlarged, and in too many instances the tonsils were left in spite of symptoms merely because they were not enlarged. The potentiality of the tonsil to lodge the streptococcus and the patient's symptoms, be they ever so indefinite, are of much more significance, and should in no case be neglected.

I have to thank Dr. J. F. Galloway for permission to publish these results.

At the last quarterly court of the directors of the Society for Relief of Widows and Orphans of Medical Men, with Mr. V. Warren Low, president, in the chair four new members were elected. A donation of £4 15s. had been received from the London Panel Committee, and £2,413 15s. was voted for payment of the half-yearly grants to widows and orphans in receipt of relief. The widow of a member recently deceased applied for relief, and the court voted her a yearly grant of £50 from the ordinary funds and one of £25 from the Brickwell Fund. There are now sixty-one widows in receipt of grants, the largest total since the foundation of the society. A subcommittee was appointed to consider the best method by which to celebrate the 150th anniversary of the foundation of the society next year. The directors desire to bring to the notice of young medical men the great advantages of membership, which is open to any registered medical man who at the time of his election is resident within a twenty-mile radius of Charing Cross. Relief is only granted to widows and orphans of deceased members. Full particulars and terms of subscription may be obtained from the secretary, 11, Chandos Street, Cavendish Square, W.1.

COMMERCE WITHOUT CONSCIENCE

DANGERS OF PATENT MEDICINE ADVERTISING

The first aim of the advertiser is to ensure that his message will be read by the greatest possible number of people of the class to which it is directed. If this object is to be achieved the advertisement must have some quality which will enable it to divert the reader's attention from numerous competing announcements; and of all the devices used for this purpose none is more effective than the topical illustration or headline. This fact is so well known to the advertising profession that Boat Race Day, for example, would not seem complete without the appearance in the public press of numerous drawings of the contending crews, illustrating more or less appositely a variety of appeals quite unrelated to university athletics. The water that flows between Putney and Mortlake may not immediately suggest a certain modified water prepared in Edinburgh, but there is no doubt that the "Younger Every Day" slogan, if accompanied at the right moment by a picture of Father William at the oars, will attract much wider attention than it would otherwise receive.

Topicality and the Appeal to Fear

But an advertisement, if it is to serve any purpose useful to the advertiser, must not only be read; having been read it must stimulate the reader to action. Now the publicity expert, whether or not he can claim acquaintance with academic psychology, knows that the surest way of influencing the behaviour of men and women is by exciting one or more of those primitive emotions which we have inherited from our subhuman ancestors and which, despite our pride in our exalted rationality, remain the driving forces of our lives, the "springs of conduct." And of human emotions few are so powerful as the emotion of fear. Happy is the advertiser whose prospective clients, puppet-like, can be roused to action by the tugging of this simple string.

The recent bus strike in London produced a crop of patent medicine advertisements in which topicality and the appeal to fear were cunningly combined. The strike was one which closely affected the daily lives of millions of men and women, whose attention was therefore readily captured by any conspicuous reference to the event in the daily newspapers; and these same millions were aware of the strikers' claim that their conditions of work were conducive to nervous and digestive troubles. The manufacturers of nostrums for these disorders were not slow to see in this situation a good opportunity to increase the pulling power of their advertising. There was published, for example, an advertisement in which, below the bold heading "Bus Conductor's Eight Years' Indigestion, Nerves, and Sleeplessness Ended at Last," appeared a picture of the one-time victim (now smiling happily at the reader from the deck of his vehicle) together with an account in his own words of how, after he had "tried indigestion remedies without number," a particular brand of tablets finally cured his "terrible agony." Another announcement, advertising a different specific, began with the startling assertion, credited to a London bus driver, that "three out of every four bus drivers and conductors suffer from gastric trouble." A third, while making no direct reference to the busmen, included a timely dissertation on the danger to the digestive system of the rush of modern life ("Hurried meals, irregular hours, nervous stress and strain"), and went on to explain the prophylactic value of a certain powder