term "euthanasia," for their opinions on it are canvassed from time to time and statistics based on them are apt to be quoted, as they were last week in the House of Lords. Lord Raglan, in introducing the Bill, said that in an opinion poll of 1,000 doctors "no fewer than 36·4% said that if voluntary euthanasia were made legal they would be prepared to administer it." What is not so clear is whether those doctors understood "voluntary euthanasia" to mean the killing of a patient by a doctor (or by a nurse under a doctor's direction, as envisaged in the Bill) with the patient's consent. Confusion is possible because the word euthanasia itself, which came into use in the seventeenth century, means no more than "gentle and easy death." This is something that every doctor would strive to ensure for his patient. The sense of deliberate killing has been added in later usage, and it is this that both the British Medical Association and the World Medical Association have declared to be contrary to the principles of medical ethics.

Changing Bacterial Endocarditis

Remarkable changes have occurred in the character of bacterial endocarditis and likewise in its treatment, both medical and surgical.[1] This was evident from the symposium held on the subject at the Royal College of Physicians on March 21 under the chairmanships of Sir Max Rosenheim and Sir John Richardson and organized by Beecham Research Laboratories. In a general account based on 265 personal cases G. W. Hayward emphasized the change in age incidence, which was confirmed by several other speakers, including J. S. Staffurth, who devoted his communication entirely to endocarditis in the elderly. The peak incidence, formerly in the thirtieth decade, has moved to somewhere near the fiftieth, and in even much older people the infection is not uncommon, often associated with malignant disease and other serious underlying conditions, and often unsuspected. The lower incidence in younger people is attributed mainly to the less frequent occurrence (and possibly better treatment) of rheumatic fever. Improved dental hygiene may also have played some part. The prognosis in patients under 40 is excellent; almost all deaths occur beyond this age.

According to Hayward the worse prognosis in older patients is attributable in part to associated myocardial disease, but largely to delay in diagnosis. "Atypical methods of presentation are almost typical": the patient may for some time have been attending any of several special departments—one of rheumatology for aches and pains, of neurology for the effects of a cerebral embolus or even the signs of a space-occupying lesion in the brain as originally described by Horder, or a department of psychiatry because sweating, palpitations, and loss of weight are ascribed to a psychic cause. The most reliable sign, he thought, was microscopic haematuria, which should be repeatedly and carefully looked for in a fresh specimen. Changes in sedimentation rate are not constant, and splinter haemorrhages are not diagnostic; moreover they may continue to appear after cure. Antibiotic treatment before admission to hospital he found to be the main obstacle to bacteriological diagnosis.

In this series the frequency of *Streptococcus viridans* infection had fallen during the past ten years, other and sometimes less manageable bacteria having taken their place, but this may be unrepresentative, since many of the patients had been referred on account of difficulty in treatment. M. Finland, of Boston, also reported a rise in the frequency of other infections, particularly by enterobacteria. Nevertheless, in Hayward's series the remarkable claim was made that no failure to control the infection has occurred in the past four years. Success depends on efficient laboratory service, in which many hours of work may be necessary to identify a combination of antibiotics which is totally bactericidal to the causative organism. No one disputed this, but there was some discussion about the necessary length of the course of treatment. P. B. Beeson, in a thoughtful communication mainly on disputed mechanisms in pathogenesis, questioned the validity of the early studies on which the policy of a six-week course is based, and pointed out that a truly bactericidal effect should be complete in less time than this. M. Ridley, in a review of experience at St. Thomas's Hospital, emphasized the danger of introducing secondary infection from either of two sources. One of these was dental extraction during a course of treatment, when the mouth flora has been selected for resistance to the antibiotic given. The second was the site of insertion of an intravenous cannula.

The most recent advances reported were in the field of surgery. G. de J. Lee discussed the indications for surgical intervention from the standpoint of the physician. After the cure of an endocarditis, he said, the principal indication for surgical treatment was gross aortic incompetence, and methods were being developed, including a new flowmeter catheter, for assessing the degree of this. On the other hand valve replacement may have to be undertaken because of rapidly increasing heart failure,[2] manifested by acute pulmonary oedema in one patient described. Operation may be indicated during the active stage of the disease, particularly in rickettsial, fungal, and possibly viral infections, when the response to medical treatment is unsatisfactory, and reoperation may be required for infection of an existing prosthetic valve.

M. Braimbridge, reviewing the subject from the surgical aspect, recognized similar indications for intervention. He also discussed preventive surgery. Closure of a patent ductus arteriosus was definitely indicated, he said, but that of a ventricular septal defect was more doubtful, since endocarditis followed the operation with almost the same frequency as it eventually occurred without intervention. Infection following surgery is often staphylococcal (*Staph. albus* as well as *Staph. aureus*) and sometimes due to *Candida* or various nondescript organisms otherwise rarely encountered. In recorded cases it has occurred in 6–9% of patients, and medical treatment has achieved survival in only 23%, but replacement of the valve raised this figure to 37%. In his own series only 2 out of 130 inserted valves have become infected, a success attributed to antiseptic suppression of the patients' skin and nasal flora before operation, strict asepsis, and treatment with methicillin and ampicillin. It is no reflection on other speakers to say that the accounts of these recent developments were the most original features of the day's proceedings. In the past far too many patients cured of endocarditis have died of the mechanical consequences of valve destruction. Not only can this damage now be repaired, but surgical intervention is now possible in the active stage of the disease.

[1] *British Medical Journal*, 1967, **2**, 389.
[2] *British Medical Journal*, 1968, **1**, 5.