

immediately and oxygen and carbon dioxide were administered, with rhythmic pressure on the bag, as, although the airway was clear, there was complete cessation of respiration. The pulse remained regular throughout, though the rate increased during the convulsions. The latter ceased, the patient's colour improved, and respiration recommenced in about three minutes. The operation was concluded under nitrous oxide and oxygen with no recurrence of the fits. The patient's condition seemed satisfactory on leaving the theatre, but he became cyanosed on return to the ward, where he was given oxygen intranasally. His recovery since then has been normal, and his condition now (a week later) is satisfactory. Morning and evening temperatures on the day of operation, and also the temperature taken immediately after the operation were completed, were normal. The temperature of the theatre was 74°.

The patient was never deeper than the first plane of anaesthesia, and only about 2 drachms of trilene was employed. This was taken from a newly opened bottle, some of which had already been used on other patients without ill effects.

COMMENT

If it may be assumed that convulsions occurring under anaesthesia are not specific to any particular anaesthetic, then this case is unusual in that pyrexia and infection, which so often are predisposing conditions, were absent. Another point to note is that no atropine had been given, and only a small dose of scopolamine. Barbiturates and possibly morphine are regarded as inhibiting factors, and the patient had been given both. The airway was clear and there was no element of anoxia up to the onset of muscular contractions. I do not think that the sensory stimuli being produced at the time of onset were strong enough to initiate the convulsions. It has been suggested that convulsions can be caused by carbon dioxide imbalance, and it seems possible that in this case the slight hyperpnoea caused by the trilene may have resulted in a low alveolar concentration of carbon dioxide, following which came the period of apnoea with spasms. In favour of this was the speedy recovery when carbon dioxide with oxygen was administered.

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Adder Bite

In view of the renewed interest taken in adder bite in Great Britain the following case may be worthy of record.

A W.A.A.F. patient aged 23 was admitted at 3.15 p.m. on July 6, 1942, to the medical department of the Newcastle General Hospital under the care of Prof. Hume. She gave a history of having been bitten by an adder in the region of the left internal malleolus at 4.30 p.m. the day before. A few minutes after the bite she noticed a swelling of her tongue and some difficulty in swallowing, swelling of the eyelids, and a gradually increasing swelling of the left leg. The swelling of the tongue lasted three hours, that of the eyelids five hours. She vomited a few times and had some abdominal pain at midnight.

On admission her general condition was good. There was a slight pyrexia of 99° F. The left leg showed a marked swelling up to the inguinal region. The skin temperature of the swollen leg was increased, and there was an erythematous rash on the medial side of the calf extending to the knee-joint. Two minute marks of fangs were seen in the region of the internal malleolus, and according to the patient these marks corresponded to the seat of the snake bite. No other abnormalities were found. The patient had complete bed-rest and no other treatment. The temperature returned to normal next day, and the swelling of the leg gradually subsided. In about two weeks the oedema had completely disappeared and the patient was allowed to get up. After three weeks she was discharged from the hospital, the bitten limb being normal in every respect.

I would like to take the opportunity of raising the question of serum treatment of adder bite. Is there any specific or satisfactory polyvalent serum against adder bite in Great Britain, and, if so, is the serum to be administered in every instance? In our case, though the patient's general condition was not much affected, there were pronounced toxic (allergic) signs, which cleared up spontaneously within two weeks.

I wish to express my thanks to Prof. Hume for his help and suggestions, and to Dr. J. A. Charles, medical officer of health, Newcastle-upon-Tyne, and Dr. G. P. Harlan, medical superintendent of the Newcastle General Hospital, for permission to publish this case.

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Reviews

EVOLUTION

Evolution: The Modern Synthesis. By Julian Huxley, M.A., D.Sc., F.R.S. (Pp. 645. 25s.) London: George Allen and Unwin. 1942.

A book on evolution may be concerned with whether it happened, what happened, and how and why it happened. whilst a preface by Shaw on the subject describes how it ought to have happened. Huxley's book is mainly concerned with how and why. He is certainly better equipped than any other British zoologist to answer these questions, for he has made personal contributions to genetics and natural history which allow him to write with authority on both topics, and has discovered quantitative laws of growth which apply both in the development of the individual and the evolution of species. His knowledge of the literature is most impressive; indeed, no writer on the subject since Darwin has produced such a body of facts from different sources in support of his standpoint.

Huxley is a Darwinist in the sense that he believes that the main trends of evolution were determined by natural selection, and not by inheritance of the effects of use and disuse, by an inner urge, or by supernatural guidance. And he holds that the steps have generally been small. But he admits that some species have arisen by sudden leaps, and that the evolutionary paths possible for a species are more limited than Darwin seems to have thought, among other things by the gene mutations available.

A large part of the book deals with the different ways in which species may originate. Where the barrier is spatial—for example, a mountain range—they may hybridize readily on meeting. Where it is one of habit—for example, a difference of flowering time or mating instincts—the hybrids may be quite fertile when formed. But, especially in higher plants, a re-organization of the nucleus may give fairly complete inter-sterility in a single step.

Medical readers will perhaps be disappointed that Huxley has not dealt in more detail with man. A good deal of human mortality is selective, apparently against predisposition to disease. And since men began to acquire skill with their right hands, human evolution has probably centred round the development of the left cerebral cortex. However, he deals vigorously with the fallacy which one still finds in some medical writings, that natural selection necessarily makes for progress. This is particularly far from the truth in a dominant species such as man, whose members, as a result of selection, may become better equipped for overcoming one another, and worse so for overcoming their environment.

In spite of this every reader who has kept an interest in zoology, and particularly in natural history, will find *Evolution* a unique storehouse of information; and for many years to come it will be absolutely indispensable for any serious study of the questions with which it deals.

J. B. S. HALDANE.

SUBACUTE BACTERIAL ENDOCARDITIS

Subacute Bacterial Endocarditis. By Emanuel Libman, M.D., and Charles K. Friedberg. Reprinted from *Oxford Loose-Leaf Medicine*. (Pp. 108. 15s.) London, New York, Toronto: Oxford University Press. 1942.

While the new chemotherapeutic agents have given striking results in the treatment of certain infections, bacterial endocarditis remains one of those which are usually uninfluenced by these drugs. Drs. E. Libman and C. K. Friedberg have written this monograph on subacute bacterial endocarditis in the hope that wider knowledge of the malady may lead to earlier diagnosis and more successful treatment. Among predisposing factors are mentioned previous valvular disease or defects, physical and mental strain, influenzal infection, operative procedures (notably dental extractions), and pregnancy and the puerperium. The section on symptomatology contains a useful survey of skin lesions, including petechiae, subungual splinter haemorrhages, Osler lesions (which are attributed to arteriolitis rather than embolism), and the less common Janeway lesions.

That subacute bacterial endocarditis may develop in many guises is shown by the authors' list of syndromes, in which

the disease is demonstrated as simulating influenza, pulmonary tuberculosis, rheumatic fever, typhoid fever, malaria, myocardial failure, hepatic or subphrenic lesions, reno-vesical disorders, gastric carcinoma, acute appendicitis, and cerebral lesions. One of the most important sections of the work is that devoted to the "bacteria-free" stage of the disease: in this phase the patient is afebrile, the skin lesions are infrequent, the anaemia persists, but a leucopenia may replace the usual leucocytosis. Sternal tenderness is mentioned more than once by the authors, but most clinicians who have sought help from this sign will probably agree that it is an uncommon phenomenon. It is not surprising that Drs. Libman and Friedberg take a poor view of prognosis; it is even perhaps remarkable that they put the spontaneous recovery rate as high as 3%. This is an important monograph on a dramatic but depressing disease.

SIR WILLIAM WILDE

Victorian Doctor. Being the Life of Sir William Wilde. By T. G. Wilson, M.B., Litt.D., F.R.C.S.I. (Pp. 338. 15s.) London: Methuen and Co.

To most of those few who remember him at all the name of Sir William Wilde is merely that of "Oscar Wilde's father." Yet the reader of Dr. T. G. Wilson's *Victorian Doctor* will readily admit that William Wilde deserves a biography in his own right—far more, indeed, than his much-publicized and unhappy son. His biographer claims for him that it was he who first put aural surgery on a scientific basis. Certainly he was the leading aurist and ophthalmologist of his day, and his hospital, St. Mark's, for years the pioneer on aural teaching in these islands. Famous throughout Europe, in Dublin he was a legendary figure, and society flocked to the house in Merrion Square where Sir William and his no less remarkable lady entertained. His greatness was not confined to surgery: he had travelled far and read widely, and he made important contributions to Irish archaeology. His last years were a period of decline, for the notorious Travers case marred his zenith. He gave less time to surgery and more to archaeology and his beloved Connaught. He died at sixty, eccentric and embittered, a quaint figure, jeered at by the children of the streets. To-day this is the only period that is remembered, even in Ireland which he served so well, and Dr. Wilson's biography is a service not only to his memory but to the history of medicine.

Wilde's was a full life, and he lived it in an age of change. Born in the year of Waterloo, he was a student in the days of body-snatching, worked in the horrors of the famine years, and lived to see the birth of antiseptic surgery. The years of his prime were the heyday of Dublin medicine, and the background of Dr. Wilson's story is richly laced with the great figures of Stokes, Graves, Colles, Crampton, and Corrigan, men whose fame has lived where Wilde's has faded. These, with the picture of the Ireland of his day, give the central figure its perspective. Nor does he lose stature by their proximity. Brilliant, imaginative, and active, entirely human in his virtues and in his vices, William Wilde has real greatness, and Dr. Wilson's admirable and delightfully written biography does him but justice.

TUBERCULOSIS IN CHILDHOOD

Tuberculosis in Childhood. By Dorothy Stopford Price, M.D. With a chapter on Tuberculous Orthopaedic Lesions, and other contributions, by Henry F. MacAuley, M.Ch., F.R.C.S.I. (Pp. 215; 87 illustrations. 17s. 6d.) Bristol: John Wright and Sons, Ltd. 1942.

It is still too common a belief that primary tuberculosis in childhood is an infection acquired and overcome by every child, with minimal, if any, disturbance of health and without significant sequelae. Occasionally we even hear the opinion expressed that such an infection is a "good thing," since by its means immunity is acquired to tuberculous disease later in life. Dr. Dorothy Price firmly, and quite rightly, believes that "many vague symptoms of ill-health besides actual disease" can be attributed to the tubercle bacillus, and that primary tuberculosis is of great importance not only because it can be immediately fatal but because it may give rise to various forms of the disease which cause severe ill-health and may prove fatal later. Dr. Price not unjustly expresses a strong opinion that too little attention is paid to this subject in this country, and therefore her book "is intended to be a brief practical guide to the diagnosis and treatment of tuberculosis

in children." Now there can be no doubt that Dr. Price has read widely the relevant literature and has herself had ample material on which to base a personal study. But, judged by the standard the author herself has set, the book is not likely to achieve its purpose. In spite of its format, it is not brief (there is much repetition) nor is it written as a "guide" should be: indeed, the reader seeking guidance for everyday practice may often be confused. The pathological background of tuberculosis is not simple, and cannot be simplified by a rigid use of the three-stage classification, which is forced on the reader on almost every page. Even more unfortunate is Dr. Price's insistence on immunological associations with the three stages, which themselves have little practical meaning in connexion with tuberculosis in childhood. There are other grounds for criticism. Thus the author states: "The foci which initiate tertiary phthisis show a marked tendency to caseation in contrast with the focus of primary tuberculosis." Clearly for "caseation" we must read "liquefaction." The following speaks for itself: "When a child is known to have passed successfully through a primary tuberculous infection and then dies some years later of tuberculous meningitis, the state of affairs is rather different from acute meningitis. These cases are uncommon; they are usually the result of a fall or blow on the head." Dr. Price revives mediastinal gland tuberculosis as "a clinical entity in which the primary lung focus is closed, but the tuberculous process in the mediastinal glands remains active." She has an unjustified belief in the value of the Hamburger ointment test and in the conclusions to be drawn from its sole use. Finally, one would need much more than the figures given by the author to convince us that "if all pulmonary cases were diagnosed during primary infection, and treatment instituted, there would be complete cure in very nearly 100 per cent."

In spite of the severe criticisms expressed, we would advise paediatricians and tuberculosis workers to read the book, not only because it contains useful and important matter, but also because it is based on a point of view fundamentally different from that current in this country.

Notes on Books

Food and Beverage Analyses, by Dr. M. A. BRIDGES and Miss M. MATTICE (2nd edition, Henry Kimpton, 20s.), provides readily accessible information on all that may be asked regarding the contents of articles of food and drink. The information covers nutritive and calorific values, quoting the percentages of carbohydrate, protein, and fat, and indicating the intake usually practised for each article. It also gives tables showing the proportions of all the mineral constituents contained in them and their values in terms of the several vitamins. The range of information is very extensive; hardly any article of diet is omitted. A general discussion of dietetic requirements and the function of vitamins completes a very useful volume.

Dr. A. H. DOUTHWAITE has again edited *Hale-White's Materia Medica, Pharmacy, Pharmacology and Therapeutics* for its 25th edition (J. and A. Churchill, 14s.). This incorporates 71 additions to the *British Pharmacopoeia* that have appeared in the official addenda. In spite of extensive additions the size of the book has shrunk without any loss of legibility. Near the index is a list of drugs which must not be prescribed during wartime or in which strict economy should be exercised by reason of their scarceness. The parts of the volume most thoroughly revised for this edition include the chapter on sulphonamides, which has been rewritten and expanded; and Dr. P. M. F. Bishop has revised his contributions on the subject of the sex hormones. Sir William Hale-White must look with pride upon this evergreen manual which he first gave to the medical profession fifty years ago—one of the good things that came from Guy's and have remained "in the family."

The calendar of the Royal College of Surgeons of England for 1942 (Taylor and Francis, Ltd., Red Lion Court, Fleet Street, 2s. 6d.) is even smaller than its predecessor, having 200 pages compared with 226 pages for 1941. Before the shortage of paper began to become progressively more acute the pages numbered well over 600. All the current official information is given, and the register of Fellows in alphabetical order, with their addresses, has reappeared, taking the place of the regulations for the diplomas and the licence in dental surgery. The Roll of Honour is now nearly twice as long as in 1941.