Letter to the Editor

Bacteroides in the genital tract of non-pregnant females

We wish to report the preliminary findings of an investigation of the significance of bacteroides infections following gynaecological operations. Ledger et al. (1971) considered most postoperative gynaecological infections were endogenous, and recently it has been demonstrated that most of these infections are caused by nonsporing anaerobes, most frequently bacteroides (Report, 1974).

We investigated the carriage of bacteroides in relation to the stage of the menstrual cycle in two selected groups of non-pregnant females. Patients seen for the first time in the gynaecological outpatient clinic were admitted to group 1, and all patients admitted to the gynaecological ward for elective surgery were admitted to group 2. High vaginal swabs were collected from each patient in both groups; cervical swabs were also collected from patients in group 1. These swabs were sent to the laboratory in transport medium and examined with standard bacteriological methods; Gram-negative obligate anaerobic bacilli which did not produce spores were accepted as Bacteroides spp.

Five-hundred and seventy-nine patients were investigated and they included 415 women of child-bearing age. The carriage rate of bacteroides in women of child-bearing age in groups 1 and 2 was 23% and 19% respectively, and 24-5% from postmenopausal women (table). In group 1, both high vaginal and cervical swabs were examined from each patient; in most instances, when bacteroides were present they were isolated from both swabs, and there was no evidence that either site of swabbing was more efficient than the other. In group 2, which is the group admitted to hospital for elective surgery, bacteroides was isolated most frequently in the first half of the cycle, whereas in group 1, which included women attending a gynaecological outpatient clinic, the incidence did not show a noticeable fall until the last week of the cycle.

This investigation indicates that, although the carriage of bacteroides may be related to the stage of the menstrual cycle, bacteroides can be isolated from the vagina throughout the cycle. This investigation does not support the findings of Neary et al. (1973), who found the carriage of bacteroides was predominant in the first week of the cycle. It therefore appears unlikely that the incidence of postoperative bacteroides infection can be significantly reduced by a restriction of elective gynaecological operations to the second half of the menstrual cycle, as suggested by Neary et al. (1973). The prophylactic use of metronidazole (Report, 1974) appears to be most effective in the prevention of these infections.

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References

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Table Carriage of bacteroides in the genital tract of non-pregnant females
Figures in parentheses are percentages. LMP = last menstrual period.

Book reviews


This excellent handbook properly assumes that the majority of those engaged in the training of medical laboratory technicians have not had any formal instruction in education and that many of them have limited practical experience of teaching. Thus the book deals briefly but well with the theory and practice of instruction and gives clear and sound advice on the construction and delivery of lectures, on the uses of visual aids, the arranging of practical demonstrations, and the moderating of group discussions and seminars. There is a useful and critical evaluation of examinations and other methods of assessment of learning with advice to examiners. The importance of ensuring that what is taught is appropriate to the work to be undertaken by the various grades of technician is rightly stressed in the book, and indeed an annex contains an outline of the work and responsibilities of medical laboratory technicians. A sensible chapter gives consideration to the selection of student technicians and their initiation to laboratory procedure. Whereas the book is designed primarily for laboratory tutors, it is appreciated that such training is undertaken by senior technical staff in busy hospital laboratories. It is essential reading for senior technicians, and many pathologists could read it with profit.

J. BURSTON


This book is based on a postgraduate course for immunopathologists held in San Francisco in 1974. Many of the lecturers were distinguished investigators in various fields of immunology, and each contributed an essay on his particular subject. These are meant to introduce and stimulate interest in new approaches to the study of diseases. For instance, the section on immunochemistry includes an article by E. C. Franklin, the discovery of ‘heavy chain disease’, on how to investi-
gate dysproteinaemias, and a review by Fred Rosen, one of the foremost workers in immunodeficiencies, on the clinical applications of complement studies. The section on cellular immunity describes lymphocyte transformation and migration tests and how to assay B and T cells in patients. There are also sections dealing with tissue typing, transplantation reactions, new methods used in allergy, and immunodiagnosis of cancer. The section on autoimmune disorders is limited to laboratory methods for haemolytic anaemias, rheumatology, and liver diseases. There was not time in a crash course to discuss the endocrine autoimmune disorders and many other recent advances.

The essays are readable and not too technical and the references are well up to 1974 so the material is reasonably up to date. The book will be popular for departmental and medical school libraries and for clinicians or pathologists who have to prepare lectures or look up a particular topic. It does not contain sufficient detail for the actual practice of all these new branches of immunology which are gradually becoming essential to modern medicine. It might stimulate some young workers to take up immunopathology as a fascinating career in which future opportunities look promising. The price is high by British standards, but this must apply to all books coming from the USA.

DEBORAH DONIACH


This hard-backed book is designed to offer guidance to small laboratories on what they should provide by way of service and embodies the proceedings of a seminar held in Chicago in May 1974. After the introductory chapter, of the same title as the handbook, five chapters deal with respiratory cultures, blood culture practices, urine cultures, faecal cultures, and wound and abscess cultures. The differences in the concept and organization of clinical microbiology in the United States and the United Kingdom are so great that this work is unlikely to help microbiologists in this country. The observation that technical staff ‘must have an acceptable education and a modest amount of experience in microbiology’ illustrates the gulf that divides practice in the two countries, and the advice not to start at all ‘if the laboratory cannot isolate organisms in pure culture and conduct a minimum number of tests to arrive at a presumptive identification of organisms likely to be encountered’ gives frightening insight into what may be a major problem in United States practice. So, too, the advice to maintain good rapport with the medical staff scarcely commends itself in a country where clinical microbiologists are the medical staff.

The book serves the purpose for which it was written and, judged from this standard, is lucidly presented and sensible. The authors are to be congratulated on their effort to improve services through education.

ROSYLINDA HURLEY


This new edition of a classical textbook deals with virtually all that is currently accepted in relation to the aetiology, investigation, diagnosis, and treatment of hepatic disease. It will undoubtedly prove even more successful than its predecessors. Professor Sherlock is a superb clinician, who gives a lucid account of the many aspects of her subject, using the minimum of words. The information contained in a textbook of this size is surprisingly wide and well up-dated. There are four new chapters, including one on hepatic transplantation, and one previous chapter has been expanded into two. There are 1000 new references and 139 new illustrations.

Unfortunately, a biochemist would justifiably raise a number of criticisms. It is the consensus that the 45-minute normal for the 5 mg/kg BSP is 0-6% and not 0-3%. In health, total serum bilirubin is not infrequently higher than 0.8 mg/dl. 5'-Nucleotidase is not as reliable in the diagnosis of cholestasis as we are given to believe. Paper has largely been replaced by cellulose acetate for electrophoresis of serum proteins. The accounts of urinary excretion of conjugated bilirubin and urobilinogen are somewhat confused. Enzyme induction does not require increased DNA. Humans differ from bacteria in regard to gene control mechanisms. Micosomes are not stimulated by ion-exchange resin but by its effects. Ceruloplasmin is not responsible for the transfer of plasma copper. Mucopolysaccharides are not glycoproteins. The formulae for the bile acids are incorrect. There are, in fact, a number of other biochemical errors. It is fortunate, however, that most, including those mentioned, do not greatly detract from the clinical worthiness of the book.

It is a pity that a superb collection of illustrations of hepatic histopathology continues to be marred by undue reduction in size, possibly for reasons of economy.

A. L. LATNER


In teaching blood group serology to trainee haematologists it is easy to refer them to the well recognized standard textbooks on the subject but they cannot be expected to read such books from cover to cover unless they are dedicated to a specialist life in this particular field. The modern haematologist is more likely to be clinically orientated and less of a leader in technology. He needs to know the principles of antigen-antibody reactions and something of the chemistry of immunoglobulins so that he can interpret clinical findings in terms of pathogenesis of disease.

Blood Group Topics is a delightfully concise, relatively easy to read paper-back volume, half of which is devoted to the anatomy and physiology of blood group antigens and antibodies. The second half of the book turns to clinical applications, starting with problems in finding compatible blood and progressing to the causes and treatment of haemolytic disease in infants and adults.

The authors claim to be addressing themselves to the busy clinician who finds the ever expanding field of immunology impinging on his understanding of diseases. The opening paragraph is a friendly warning to readers not to be daunted if they find the first chapter too foreign; it is suggested they start with a later chapter and come back to the beginning.

In the reviewer’s opinion, this book has a much wider application and should be recommended to candidates for the MRC Path examinations in haematology and immunology as it puts blood group serology into perspective.

W. J. JENKINS