Drs Bignardi and Khong comment:

Drs Feldman and Salisbury criticised us for not testing our anti-Salmonella O6·7 serum against other organisms, but what we used belongs to a panel of sera (Central Public Health Laboratory, Colindale) which is widely and successfully used in this country for the identification of *Salmonella* serotypes. Using a slide agglutination technique intra- and interspecific cross reactions can certainly occur, though they are not likely to persist if a tube technique with multiple dilutions down to the expected titre is attempted. While some cross reactions are well known, such as that between group B salmonellae and *Yersinia pseudotuberculosis* serogroup II and that between group D salmonellae and *Yersinia pseudotuberculosis* serogroup IV, other possible cross reactions have attracted less attention. All practising microbiologists recognise these problems so that the identification of *Salmonella* isolates is never based on seroagglutination alone but on a combination of seroagglutination and biochemical testing.

We would agree that some monoclonal antibodies might produce better immunohistochemical staining, but we do not think that this would eliminate the problem of cross reactivity which may be due to close affinity or identify among antigens carried by strains belonging to different and even completely unrelated bacterial species. Feldman and others tested their monoclonal antibody against a few other strains.[1] We think that this might give a sense of false security and that it would be much better to identify clearly what is one's target. In the case we described, *Salmonella virchow* was isolated from necropsy specimens and identified according to conventional microbiological criteria. The purpose of the immunoperoxidase staining was not to identify an unknown pathogen but to assess which organs had been involved.

We are sorry to have overlooked the work of Feldman and others,[1] but their use of a commercially available polyclonal antiserum is not apparent from the title of their article. The quotation of the other three reports[2-4] is inappropriate as these authors seem to have used only purposely produced antisera. Feldman and Salisbury seem to have missed our point. The production of antisera is beyond the scope of the average diagnostic laboratory, but we showed that an easily available polyclonal serum can be used to identify the site of infection when routinely processed tissue is available and the infectious agent has been identified by conventional methods.

References

1 Feldman RG, Law SM, Salisbury JR. Detection of group B streptococcal antigen in necropsy specimens using monoclonal antibody and immunoperoxidase staining. *J Clin Pathol* 1986;**39**:223–6.

2 Ferreira Alves VA, Vianna MR, Yasuda PH, De Brito T. Detection of leptospiral antigen in the human liver and kidney using an immunoperoxidase staining procedure. *J Pathol* 1987;**151**:125–31.

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4 Winkler B, Reumann W, Mitao M, Gallo L, Richart RM, Crum CP. Immunoperoxidase localisation of chlamydial antigens in acute salpingitis. *Am J Obstet Gynecol* 1985; **152**:275–8.

Value of throat swabs in meningococcal meningitis

We were interested to read the article by Cartwright and Jones on the investigation of meningococcal disease, in particular their discussion of the value of throat swabs as an aid to diagnosis.[1]

Patients with meningococcal meningitis have often (quite correctly) received antibiotics before being admitted to hospital. In anticipation of negative cerebrospinal, blood (and throat) cultures from the patient, an "epidemiological" approach using throat swabs from contacts has sometimes been used to attempt to identify the infecting strain.

Cartwright and Jones point out that as many as 25% of young adults are likely to carry meningococci in the throat, suggesting a very poor predictive value of an isolate from a contact. We have confirmed this by looking back at our cases of confirmed meningococcal meningitis over the past three years in which contacts also had throat swabs taken (table).

Of the five cases of confirmed meningococcal meningitis in which contacts also carried a meningococcus in the throat, the organisms were indistinguishable in both index case and contact on only one occasion (case 3). Furthermore, in this instance another close contact was carrying a completely different meningococcus.

This pronounced lack of correlation between organisms causing meningococcal disease and those carried by close contacts suggests that the practice of taking throat swabs from contacts as an aid to diagnosis is of no value.

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Reference

1 Cartwright KAV, Jones DM. Investigation of meningococcal disease. *J Clin Pathol* 1989; **42**:634–9.

Table *Comparison of isolates of meningococci from cases and contacts*

Case no	*Isolate from patient*	*Isolate from contact*
1	Group C NT	a) Group B NT b) Group B15 P1 16 c) Group NG
2	Group C 2a P1 15	a) Group B NT
3	Group B4 P1 16	a) Group B4 P1 16 b) Group NG NT P1 15
4	Group B NT	a) Group B4 P1 15
5	Group B P1 16	a) Group NG 4 P1 15 b) Group B 2b

Book reviews

Perfecting the World. The Life and Times of Dr Thomas Hodgkin 1798–1866. Amalie M Kass, Edward H Kass. (Pp 642; £24·50.). Harcourt Brace Jovanovich Ltd. 1988. ISBN 0 15 171700 1.

Thomas Hodgkin had powers of penetrating observation which put him ahead of most of his generation yet history has failed to acknowledge this. When the Governors of Guy's Hospital, led by their Treasurer, rejectd Hodgkin's promising canditature they initated his belittlement by history as well. Now we have the benefit of the authors' knowledge of medicine, history, and importantly, of Quaker conviction to present a new biography of Thomas Hodgkin, a man hitherto little known other than by the diseases called after him. Hodgkin was an observer of clinical and pathological medicine second to none and his students knew this, as did his distinguished colleages Addison and Bright.

Enough is told of Hodgkin's own views on specific diseases to allow pathologists to appreciate for themelves how often he anticipated modern thinking although he lived at the time when the compound achromatic miscoscope had only just been invented. He had a strict code of moral rectitude and devoted himself generously to many issues where he felt he could help those who could not speak for themselves. Maybe Thomas Hodgkin did not practise personal charm but he had much else. The book is full of interest.

HT SWAN

Soft Tissue Sarcomas. Histological Diagnosis. AD Nash. Biopsy Interpretation Series. (Pp 285; $81.50.) Raven Press. 1989.

The stated aim of this fairly short book is to be a guide to the histological diagnosis of malignant or potentially malignant soft tissue tumours. The book is organised in chapters devoted to each "histogenetic" group with an introductory chapter on general principles and a closing chapter on electron microscopy by JC Vuletin. While there is a probable need for a shortish, manageable book of this type, such a text has to bear comparison with the gold standard of Enzinger and Weiss. Unfortunately this monograph does not survive this acid test.

The style of the book is very conventional, if not old fashioned, and most of it could easily have been written 10 or 15 years ago. Recent developments or controversies of importance are not mentioned; for example, the concept of atypical lipoma, the relation between peripheral neuroepithelioma, Askin tumours, and Ewing's sarcoma, or the existence of extra-renal rhabdoid tumours. The concept of MFH, particularly its pleomorphic variant, is unquestioningly accepted and perpetuated. Very few references dated after late 1986 are included, which probably reflects delay at the publishers.

Although reasonably priced, I would not recommend the purchase of this book—Enzinger and Weiss more than justifies the extra £50 you'll have to spend.

CDM FLETCHER

Bone Marrow Transplantation. Current Controversies. UCLA Symposia on Molecular and Cellular Biology. New Series, Vol 91. Ed RP Gale, RE Champlin. (Pp 700; $135.) Alan R Liss. 1989. ISBN 0-8451-2690-3.

This volume is based upon a series of papers presented at a UCLA symposium held in March 1988. As well as current data from the major American and European centres, there are excellent reviews of controversial areas such as the role of bone marrow transplantation in the management of childhood acute lymphoblastic leukaemia by Gale and Butturini and the use of autologous bone marrow transplantation in acute myeloblastic leukaemia in chapters by Champlin and Burnett. Particular sections of interest include an update of the Baltimore group's data on autologous bone marrow transplantation in second remission using purged marrow, the results of which remain impressive, although the case for purging in this situation is not yet made. Results of bone marrow transplantation in genetic disease, myeloma, lymphoma, solid tumours, and thalassaemia are also extensively reviewed by leading groups in each field. This is a book which should be on the shelf of all clinicians and researchers engaged in transplant programmes, and the editors are to be congratulated on providing such a comprehensive and readable text.

NH RUSSELL

Laboratory-Acquired Infections. History Incidence, Causes and Prevention. 2nd ed CH Collins. (Pp 295; £29.) Butterworths. 1988. ISBN 0 407 00218 9.

This second edition is an extremely useful source for the documentation of potential risk and for practical advice on how to minimise the acquisition of laboratory related infections. The first five chapters deal with the accumulated data and review the extensive literature on the subject, including legislation and the official hazard classification of organisms. Subsequently, Collins discusses safe laboratory practices and there is useful information on the physical requirements of a laboratory with respect to health and safety. A new chapter deals with HIV disease as it relates to laboratory workers and provides advice on the practical management of high risk specimens. The well documented risks of hepatitis, typhoid fever, and tuberculosis are explored and there is even mention of the agents causing spongiform encephalopathies and hazardous parasites.

Although this is not a book for casual reading, the detail and care with which the data are presented attest to Collins' profound interest and expertise. It should be an essential reference available in all laboratories dealing with biological specimens and an integral part of Pathology Department libraries.

S HEARD

Ceroid-Lipofuscinoses. Batten Disease and Allied Disorders. Eds JM Opitz, RK Pullarkat. (Pp 308; &85.) Alan R Liss. 1988. ISBN 0-8451-4251-8.

This book is a compilation of papers presented at a meeting in May 1987 at which the clinical, pathological, and biochemical aspects of Batten's disease (also known as ceroid-lipofuscinosis) in man and in animals were discussed by 75 leading researchers in this group of diseases. There is also an extensive bibliography covering the years 1970–1986, and three reports on treatment which did not seem to be effective.

The clinical section did not add much to what had already been published in the proceedings of an earlier similar meeting in 1980. The morphological appearances are well covered, and the application of electron microscopic examination of uncultured amniotic fluid cells to prenatal diagnosis is described. The animal models, particularly the sheep, have provided an opportunity for studying purified storage bodies of which a low molecular weight protein seems to be a major component.

This update on the research into Batten's disease should be availble to all those involved in the diagnosis, management, and biochemical study of the group of disorders collectively known as ceroid-lipofuscinoses.

BD LAKE

Basic Histology and Cytology for Medical Laboratory Scientists. AW Currie. (Pp 161; soft cover £12·95.) Churchill Livingstone. 1988. ISBN 0-443-03402-8.

This is a book for MLSOs who are working for HNC and the Special Examination of the Institute of Medical Laboratory Sciences. It is quite short, easily readable, and cheap. It covers a lot of ground including the expected chapters on fixation, processing, microtomy, staining, and microscopy as well as less usual topics such as laboratory organisation (but not management), computers, and how to write an essay. The chapters on microscopy, histochemistry, and immunohistology are given greatest detail and are the best.

There are only a few line drawings and these are helpful. Some additional illustrations would be a considerable improvement, particularly diagrams of a cryostat, a light microscope, and a simplified electron microscope. Further emphasis should have been given to the use of control tests, control tissues, and quality control schemes in this