A previous resection from the same site showed a schwannoma with no evidence of malignancy, and similar benign areas are present in the current biopsy. This supports our assumption that this malignant tumour has arisen by transformation from the previous lesion. An issue with this case is the history of previous radiation. It has been reported that irradiation may induce neurofibrosarcoma.⁵ These cases report malignancy arising within previously normal nerves and do not describe the induction of malignancy within a previously benign tumour. Regardless of this possible aetiology, we believe that this case represents malignant transformation within a previously benign vestibular schwannoma, and therefore presents a rare case.

J S Wilkinson, H Reid, G R Armstrong

Department of Histopathology, Hope Hospital, Stott Lane, Salford, M6 8HD, UK; helen.reid@srlt.nhs.uk

References

- 1 **Mc Lean CA**, Laidlaw JD, Brownhill DSB, et al. Recurrence of acoustic neurilemmoma as a malignant spindle cell neoplasm. *J Neurosurg* 1990;**73**:946–50.
- 2 **Yousem SA**, Colby TV, Ulrich H. Malignant epithelioid schwannoma arising in a benign schwannoma. *Cancer* 1985;**55**:2799–803.
- 3 **Kudo M**, Matsumoto M, Terao H. Malignant nerve sheath tumour of acoustic nerve. *Arch Pathol Lab Med* 1983;**107**:293–7.
- 4 **Carstens PH**, Schrödt GR. Malignant transformation of a benign encapsulated neurilemmoma. *Am J Clin Pathol* 1969;**51**:144–9.
- 5 **Ducatman BS**, Scheithauer BW. Postirradiation neurofibrosarcoma. *Cancer* 1983;**51**:1028–33.

Best practice guideline on microbiological investigation of infertility requires further review

The best practice guideline on the investigation of infertility briefly comments on appropriate microbiological investigations.¹ However, there are several issues that we feel merit further consideration.

The need to check the rubella immunity status of the female partner is highlighted. This point is also stressed by the Royal College of Obstetricians and Gynaecologists (RCOG).² Testing for blood borne viruses (antibodies to hepatitis B surface antigen, human immunodeficiency virus, and hepatitis C) is also commented upon in the best practice guideline as a general investigation and has been similarly suggested in a recent clinical review.³ However, no such guideline has been issued by either the RCOG or the British Fertility Society. Nevertheless, the Human Fertilisation and Embryology Authority has set a deadline of the end of 2004 for the screening of all women/couples participating in licensed infertility treatments (in vitro fertilisation, intracytoplasmic sperm injection, donor gamete therapy) for blood borne viruses.

The wisdom of this approach is questionable for two reasons. First, if testing of subfertile couples is part of the continuum of their care from preconception to birth, then why repeat the process when pregnant women will routinely be offered blood borne virus (and syphilis) screening during their antenatal care? Second, because the prevalence of blood borne virus infection in patients seeking infertility advice will probably

be low (possibly <1%), where is the evidence that universal blood borne virus screening is cost effective?

We believe that scarce financial resources would be better spent on a screening programme for asymptomatic chlamydia infection in the infertile population. This should be based on a chlamydia molecular amplification test, using urine, lower vaginal swabs, or endocervical swabs, and not chlamydia serology, as has been suggested previously.³ Screening for chlamydia is not mentioned in the best practice guideline but is recommended by the RCOG. This is particularly important in women who will be undergoing uterine insemination as part of their fertility investigation or treatment. In general, this will mean routinely testing women less than 25 years of age.⁴ One in 10 sexually active women in England is currently thought to be infected with chlamydia.⁵ Those identified as chlamydia positive could then be offered blood borne virus screening linked to a genitourinary counselling service.

Finally, the best practice guideline makes no comment on screening for cytomegalovirus immunity. Although not routinely recommended, cytomegalovirus IgG testing should be considered both for women who receive donor gametes (sperm or oocytes) and the donors of such gametes.

R P D Cooke, D K C Chui

East Sussex Hospitals NHS Trust, Department of Medical Microbiology, Kings Drive, Eastbourne, East Sussex BN21 2UD, UK; Richard.Cooke@aht.nwest.nhs.uk

References

- 1 **Williams C**, Giannopoulos T, Sherriff EA. Investigation of infertility with the emphasis on laboratory testing and with reference to radiological imaging. *J Clin Pathol* 2003;**56**:261–7.
- 2 **Royal College of Obstetricians and Gynaecologists**. *The initial investigation and management of the infertile couple*. Evidence-based clinical guidelines, No 2. London: RCOG Press, 1998.
- 3 **Cahill DJ**, Wardle PG. Management of infertility. *BMJ* 2002;**325**:28–32.
- 4 **Royal College of Obstetricians and Gynaecologists**. *The management of infertility in tertiary care*. Evidence-based clinical guidelines, No 6. London: RCOG Press, 2000.
- 5 **House of Commons**. *Sexual health: the third report of session 2002–3*. London: HMSO, 2003.

BOOK REVIEWS

Pathology of the Pancreas, Gallbladder, Extrahepatic Biliary Tract and Ampullary Region

Lack E. (£145.00.) Oxford University Press, 2003. ISBN 0 19 513392 7.

Superb! The author has succeeded in producing an excellent textbook covering an extensive range of pathology, including both common and exotic entities.

As the title suggests, this book is divided into three parts: "I. Pancreas", "II. Gallbladder", and "III. Extrahepatic biliary tract and ampullary region". The first chapter, entitled "Embryology, anatomy, and function of the exocrine and endocrine pancreas", includes original artwork and makes for very interesting and informative reading.

The approach is extremely methodical and the text is comprehensive. The text is written under appropriate headings/subheadings, which makes it easy to read. Where relevant, there is additional information on frozen section and fine needle aspiration. I found that the book covered most common entities in detail and I do not see how this area of pathology could have been covered any more extensively. Special mention must be made about the excellent illustrations used in this book. The text is supported by over 1000 high quality, colour illustrations. These include well chosen colour images of gross and microscopic pathology, in addition to numerous colour artwork illustrations that enhance the text. Pertinent ultrastructural images are also included.

This is not meant as a major criticism, but if there is any downside, it has to be the small size of the print, which was smaller than that of most other pathology textbooks.

This book is an absolute must for histopathologists reporting on specimens of the pancreas, gallbladder, extrahepatic biliary tract, and ampullary region. I also strongly recommend this book to pathology trainees and other clinicians. I predict that this book will become one of the standard pathology textbooks on pancreatic, gallbladder, and extrahepatic biliary diseases.

D Govender

Worms and Human Disease – Second Edition

Muller R. (£35.00.) Cabi Publishing, 2002. ISBN 0 85199 516 0.

This book is the second edition of *Worms and disease: a manual of medical helminthology* first published in 1975.

It covers this branch of parasitology in sufficient detail, especially because significant advances have been made since 1975 in immunology, molecular biology, diagnosis, and treatment aspects of this complex branch of medicine.

The text is balanced by core information and additional descriptions without resorting to elaborate and bulky text, which would have increased costs and added little to its use as a ready reference.

It succeeds as "a practical guide in human helminthology for physicians and medical technologists", and will find favour among postgraduate students in tropical diseases, undergraduate medical, zoological, and tropical engineering students, and technologists.

However, it does not cover detailed pathology and aspects of differential diagnosis, perhaps reserved for more specialised textbooks, which may not appeal to the intended wider reader base.

The reader is given adequate references, most of which are derived from the 1980 to 2000 period.

The life cycles and illustrations (including maps and drawings) are useful, with commendable appendices at the end of the book (notably Appendix 2 dealing with the glossary of helminth terms and Appendix 3, which covers the location of helminths in the human body).

The overall impression is that the book is a worthy addition to any medical library, and it is highly recommended for students in both clinical and laboratory medicine, workers in

these disciplines, and allied sciences where helminthology has a bearing.

A Essa

Cancer Cytogenetics: Methods and Protocols

Swansbury J, ed. (\$89.50.) Humana Press, 2003. ISBN 1588290808.

The discovery of the Philadelphia chromosome by Nowell and Hungerford in 1960 greatly stimulated interest in cancer cytogenetics. Once banding techniques were refined in the 1970s, the field of cancer cytogenetics blossomed and benefited tremendously from the wealth of information that was quickly amassed. Today, the field is still growing rapidly with the advent of molecular cytogenetic techniques, such as fluorescent *in situ* hybridisation (FISH), multicolour FISH, spectral karyotyping, and comparative genomic hybridisation. However, there are fewer cancer cytogenetics laboratories than clinical cytogenetics laboratories because of the lower demand for this service. This is changing rapidly, as new prognostic associations are constantly being discovered. Therefore, Dr John Swansbury aimed to help those wishing to start a cancer cytogenetics service by putting together *Cancer cytogenetics: methods and protocols*.

Dr Swansbury wrote most of the book himself, but excellent contributions were made by some very prominent cancer cytogeneticists. The book is designed such that a chapter of background material on a certain topic is followed immediately by a technical chapter on the same topic. Chapters included most of the main areas of interest in cancer cytogenetics, such as myeloid disorders, acute lymphoblastic leukaemia, other lymphoid disorders, solid tumours, and FISH. There is also a chapter on the interpretation of cytogenetic findings, which is extremely important in malignancies. The background chapters are generally well written in a simplistic way for the novice. Cancer cytogenetics can be a very intimidating field for those not familiar with it, and Dr Swansbury does a good job of introducing it. The technical chapters are quite comprehensive and also very well written, with step by step and easy to follow protocols. There are plenty of explanations and trouble shooting suggestions for the many things that can go wrong in a cancer cytogenetics service laboratory.

One of the drawbacks of the book is that it does not put enough emphasis on the importance of prognostic FISH markers in haematological disorders and solid tumours. This is a rapidly growing field, and FISH plays an important role not only in the diagnosis of a malignancy, but also in the prognosis and response to treatment. FISH plays such a large part in the cancer cytogenetics laboratory today that it would have been useful to spend more time on its clinical applications. The book could have benefited also from a chapter on quality control and quality assurance. The service laboratory is very different from a research laboratory, and one must be sure of the results that are reported. It would be best to implement quality control and quality assurance measures right from the start, rather than to change things after a mistake has been made. Quality measures are crucial in all aspects of the cancer cytogenetics service, from culture set up and

harvesting, to metaphase analysis, FISH probe validation, right through to reporting.

This book is aimed at the novice and does a very good job in getting one started with a cancer cytogenetics service. However, nothing can replace experience, and it is highly recommended that anyone starting out in the field should visit an established laboratory to see first hand how things are set up. I have no hesitation in recommending this book to any cytogeneticist interested in expanding their service to include malignancies, or to anyone interested in starting up a cancer cytogenetics laboratory.

K Chun

Manual of Clinical Microbiology, 8th Edition

Murray P R, Baron E J, Jorgensen J H, *et al*, eds. (\$189.95.) ASM Press, 2003. 1 55581 255 4.

The manual of clinical microbiology, published by ASM Press, is a favourite of mine because of its immense detail and vast coverage of the field. The first edition was published in 1970, with subsequent editions following at four to six yearly intervals, and culminating in this 8th edition, which has been expanded into a two volume set with 141 chapters and 2113 pages, written by 230 authors and an international editorial board composed mainly of microbiologists from the USA.

The manual of clinical microbiology is a colossal resource, which is very well presented and beautifully illustrated. Volume I includes sections on "General issues in clinical microbiology", "The clinical microbiology laboratory in infection detection, prevention and control", "Diagnostic technologies in clinical microbiology", "Bacteriology", and "Antibacterial agents and susceptibility test methods". Volume II includes sections on "Virology", "Antiviral agents and susceptibility test methods", "Mycology", "Antifungal agents and susceptibility test methods", "Parasitology", and "Antiparasitic agents and susceptibility test methods".

The chapter on "Mycobacterium: phenotypic and genotypic identification" is 24 pages long, contains 170 references, and begins with an extensive description of phenotypic identification tests for mycobacteria, with tabulated data for the various cultural and biochemical tests, along with 16 large colour photographs of macroscopic and microscopic colonial morphology. Then there is a short discussion of mycobacterial genomes, including reference to the propensity within the genome for the production of enzymes involved in fatty acid metabolism (as compared with *Escherichia coli*, for example), and the fact that the genus has an extremely clonal population structure, with genomic variation largely caused by insertion sequence movement rather than by point mutations. This leads into a section on "Genotypic identification of mycobacterial strains", which begins with an introduction describing the development of the polymerase chain reaction (PCR) and restriction endonuclease analysis for detection of mycobacteria and the seminal work of Amalio Telenti. This is followed by a discussion of aspects and uses of commercially available identification probes (AccuProbe and INNO-Lipa), genome sequencing, markers for species identification within the *Mycobacterium tuberculosis* complex,

and direct amplification tests, including the amplified *M. tuberculosis* direct test and Amplicor PCR test. Following this are sections on "Strain typing", "Immunodiagnostic tests", "Quality assurance", and "Interpretation and reporting of results".

My only criticism is that occasional chapters are a little light. For example, the chapter on "Antifungal agents" is only 10 pages long and would have benefited from additional consideration of the relative merits of the recently expanded range of available antifungal agents.

In conclusion, I will continue to use this excellent and detailed resource in its updated form primarily as a reference text because of its comprehensive content, good organisation and therefore ease of access to relevant sections, beautiful presentation, and particularly its academic depth relating to the practice of clinical microbiology.

J Kerr

Cytokines and Chemokines in Infectious Diseases Handbook

Kotb M, Calandra T. (\$145.00.) Humana Press, 2003. ISBN 0 89603 908 0.

Cytokines are soluble protein molecules that facilitate communication between cells of the immune system, and as such, orchestrate immune responses required to eliminate or localise invading infectious agents. Therefore, these molecules have obvious relevance to the study of infectious disease.

This book is divided into sections on cytokines in infectious disease, Gram negative infection, Gram positive infection, mycobacterial infection, other bacterial infection, fungal infection, parasitic infection, viral infection, cytokines as therapeutic agents in infectious disease, and anticytokine based therapy in treatment of infectious disease.

Certain chapters contain comprehensive information that is well presented, such as that on cytokine patterns in severe invasive group A streptococcal infections. However, others are superficial and inadequate, such as that on cytokine gene polymorphisms and host susceptibility to infection. This chapter contains sections on tumour necrosis factor α , interleukin 1 (IL-1), IL-1ra and other cytokines. However, the possibilities for a chapter on this topic are extensive and should also include sections on at least interferon γ (IFN γ) and IL-10.

The section on cytokines in viral infections is superficial, with chapters only on viroceptors, human immunodeficiency virus (HIV) infection, and viral hepatitis. Chapters one might expect in this section would be those on Epstein-Barr virus induced cytokines and the relevance of this to diseases such as cancer and rheumatoid arthritis; Kaposi's sarcoma associated herpesvirus and the relevance of its IL-6 homologue to lymphoma, etc, etc. It seems odd to have a section on cytokines in viral infection and then to consider only three examples.

The section on cytokines as therapeutic agents in infectious disease contains chapters on IFN γ , IL-2 for HIV, and the use of granulocyte colony stimulating factor/granulocyte-macrophage stimulating factor. The section on anticytokines as treatment considers only septic shock, streptococcal toxic shock, and necrotising fasciitis.

Although the book could be very useful in some contexts, such as sepsis and HIV, it lacks overall depth and clarity of structure and remit.

J Kerr

Differential Diagnosis by Laboratory Medicine

Mesko D. ed. (£35.00): Springer-Verlag, 2003. ISBN 3 540 43057 1.

What do you do when you get phoned in your laboratory office by a clinical colleague asking you what are the 10 causes of a raised urine δ aminolevulinic acid? Well, you could disconnect the phone and hope they don't call back, you could start gabbling and say you have never heard of it, or alternatively you could consult this book! This 1000 plus page text is, indeed, a treasure trove of useful laboratory facts.

The book covers thoroughly many laboratory parameters in various biological materials. Other useful features were a detailed description of medications and how these may interfere with laboratory tests, and a section listing laboratory findings in a variety of clinical conditions. I also found the tables of what sampling tubes were necessary for particular laboratory tests extremely helpful. To add to this there are tables of reference ranges for numerous laboratory tests and also conversion factors for changing conventional units to SI units.

This vademecum is written by a group of experienced laboratory workers and covers clearly many aspects of clinical biochemistry, haematology, microbiology, and immunology

and is a worthy addition to any clinical laboratory's bookshelf. I heartily recommend it.

M Crook

CALENDAR OF EVENTS

Surgical Pathology for the Practising Pathologist

16–19 January 2004, Doubletree La Posada Resort, Scottsdale, Arizona, USA

Further details: Department of Continuing Education, Harvard Medical School, PO Box 825, Boston, MA 02117-0825, USA. (Tel: +1 617 384 8600; Fax: +1 617 384 8686; Email: hms-cme@hms.harvard.edu)

Surgical Pathology for the Practising Pathologist: Selected Topics

26–29 March 2004, Sanibel Harbour Resort and Spa, Fort Myers, Florida, USA

Further details: Department of Continuing Education, Harvard Medical School, PO Box 825, Boston, MA 02117-0825, USA. (Tel: +1 617 384 8600; Fax: +1 617 384 8686; Email: hms-cme@hms.harvard.edu)

Medicare India

6–8 April 2004, Pragati Maidan, New Delhi, India

Further details: Rob Grant, Kinex Log, 5 New Quebec Street, London W1H 7DD, UK (Tel: +44 (0) 207 723 8020; Fax: +44 (0) 207 723 8060; Email: rob.grant@kinexlog.com; Website: www.medicare-expo.com or www.kinexlog.com)

Diagnostic Histopathology of the Breast

10–14 May 2004, Hammersmith Hospital (Imperial College Faculty of Medicine), London, UK

Further details: Wolfson Conference Centre, Hammersmith Hospital, Du Cane Road, London W12 0NN, UK. (Tel: +44 (0) 20 8383 3117/3227/3245; Fax: +44 (0) 20 8383 2428; Email: wcc@ic.ac.uk)

Practical Pulmonary Pathology

27–30 July, 2004, Brompton Hospital, London, UK

Further details: Professor B Corrin, Brompton Hospital, London SW3 6NP, UK. (Tel: +44 (0)20 7351 8420; Fax: +44 (0)20 7351 8293; Email: b.corrin@ic.ac.uk)

ACP Management Course for Pathologists, 2004

8–10 September 2004, Hardwick Hall Hotel, Sedgfield, County Durham, UK

Further details: V Wood, ACP Central Office, 189 Dyke Road, Hove, East Sussex BN3 1TL, UK. (Tel: +44 (0) 1273 775700; Fax: +44 (0) 1273 773303; Email: valerie@pathologists.org.uk)

CORRECTION

The Scotland and Newcastle epidemiological study of Hodgkin's disease: impact on histopathological review and EBV status on incidence estimates. Jarrett RF, Krajewski AS, Angus B, *et al.* *J Clin Pathol* 2003;**56**:811–6. In the key to fig 3A EBV– should have been shown as triangles and EBV+ as squares.