method and 4503 by the radiometric technique. Indeed, the radiometric method, being less cumbersome, allowed twice daily examinations where appropriate. The species distribution of 333 isolates detected by the manual method during 1976–83 were similar to the 173 isolates detected by the radiometic method during 1984–85. The proportionate distribution of the isolates were *Escherichia Coli* 25%, *Staphylococcus aureus* 15%, *Proteus* sp 11%, *Streptococcus pneumoniae* 10%, *Staph albus* 10%, *Streptococcus* sp 7%, *Haemophilus influenza* 6%, *Bacteroides* sp 3%, and others 12%. The antibiogram of the strains isolated since 1980 showed that 96·4% of the strains were sensitive to augmentin, 89·4% to cefuroxime, 83·4% to cephradine, 82·4% to co-trimoxazole, and 57·5% to amoxycillin. One out of nine *Pseudomonas* sp isolates was resistant to gentamicin. The remaining strains were sensitive to aminoglycosides and uridiopencillin.

Isolates by both techniques were obtained from patients suffering from diseases of similar clinical spectra. They included 28% with fever of unknown origin, 19% with septicaemia, 9% with gastrointestinal aetiology, 12% with bronchopneumonia, 8% with meningitis, 6% with urinary tract infections, and 23% with other diagnoses. Bacteraemia occurred at all ages, being predominant at the two extremes of life (< 1 yr: 10%, and > 60 yrs: 35%). On the whole, there was no prominent seasonal variation in isolation rates. *Strep pneumoniae* isolation, however, showed a peak during November to March and a trough in June and July. Similarly, *E Coli* isolates peaked during July to September.

Blind subculture of blood cultures is time consuming, tedious, and increases the chances of contamination. The results obtained by the Bactec system were no different from the manual technique in rate of isolation. Even when seasonal variation, agent, and host factors were compared, isolation rates remained more or less identical. The manual system allowed us to increase our throughput by at least 58% without any increase in technical time.

The epidemiological analysis is of value for advice on blind treatment. It was also interesting to note that most of the strains were sensitive to cheap and currently used antibiotics.

AMA ABBAS
C HUGHES
Department of Microbiology
Rotherham District General Hospital,
Moorgate,
Rotherham SG0 2UD

References

[1] Ganguli Leela A, Keaney Maeve GL, Hyde WA, Fraser Susan B. More rapid identification of bactereamia by manual rather than radiometric method. *J Clin Pathol* 1985; **38**:1146–9.
[2] Gould JC, Duerden BI. Blood culture—current state and future prospects. *J Clin Pathol* 1983;**36**:963–77.

Donor Screening for Anti-HBs

Although we support English attempts to introduce large scale donor screening for antibody to hepatitis B surface antigen (anti-HBs), we feel that Lake *et al*[1] are unfair to radioimmunoassay methods.

We have been screening on a large scale for several years, and our current method is a modification of a solid phase inhibition radioimmunoassay,[2] standardised to detect plasma with anti-HBs content > 10 IU/ml. The labelled anti-HBs is recycled from our routine hepatitis B surface antigen testing, and the cost per test is roughly 3 pence. For daily screening overnight incubation is not possible or necessary.

Specific advantages are: that no sample dilution is required; the method suits existing radioimmunoassay technology; and an objective result is easily processed by computer. When a strong antibody is identified its content is estimated by a modification of the Bureau of Biologics Method, which gives the accuracy and precision required to ensure suitable material is forwarded for fractionation. Using the above strategy for random screening in conjunction with a plasmapheresis programme, 96 kg of suitable plasma was obtained in the year 1984–85.

Finally, we do not support the use of a modified haemagglutination method for clinical purposes, unless it is capable of detecting antibody values of 0·01 IU/ml—a value obtained by radioimmunoassay methods.

RJ CRAWFORD
I MACVARISH
A B-.RR
R MITCHELL
Glasgow and West of Scotland Blood Transfusion Service,
Law Hospital,
Carluke ML8 5ES

References

[1] Lake SM, Puckett AY, Entwhistle CC. Donor screening for antibody to hepatitis B surface antigen. *J Clin Pathol* 1985;**38**:1195–6.
[2] Hopkins R, Ross S, Barr A, McClelland DBL. Selection of plasma for hepatitis B immune globulin using a low cost radioimmunoassay. *Vox Sang* 1981;**40**:6–11.

Book reviews

Tumor Markers in Cancer Control. Ed HE Nieburgs, JH Holzner, VE Valli. (Pp 360; £52.) Alan R Liss Inc. 1985.

This ambitiously titled volume comprises the proceedings of the second international conference on tumour markers. Like its predecessor published two years ago, most of the contributions relate to one or more monoclonal antibodies raised against tumour associated proteins, none of which is in any way specific for cancer. It is perhaps important that carcinoembryonic antigen continues to figure so prominently in a book of this kind, still seeking recognition as a tumour "marker" some 20 years after its discovery. It is, however, pleasing to see a trend against this pattern, with more chapters on biochemical and chromosomal changes in cancer. Pathologists working with tumours will find this a useful book, but at £52, which represents a 20% increase in price, they might be best advised to request their library to buy it.

PG ISAACSON

Tumors and Tumorlike Conditions of the Ovary. Contemporary Issues in Surgical Pathology. Ed LM Roth, B Czernobilsky. (Pp 296; £57.) Churchill Livingstone. 1985.

The stated aim of this book, one of a north American series of texts on surgical pathology, is "to present a state of the art assessment of ovarian cancer for the practising surgical pathologist and gynaecologist." Solid workman like chapters on the various types of primary ovarian neoplasms, secondary ovarian tumours and tumour like conditions are followed by chapters devoted to aspiration cytology, ultrastructure, immunochemistry, and steroid hormone receptors. There is, unusually but refreshingly for a surgical pathology book, an excellent chapter on the treatment of ovarian cancer.

Sound and accurate throughout, the book is lifted well above the norm by a scholarly, though highly selective, historical survey of ovarian pathology. It is fascinating to learn that the Stein-Leventhal syndrome was actually reported by Irving Freiler Stein and Michael Lee Levanthal and that Fritz Brenner spent most of his life as a general practitioner in South Africa, completely unaware that there was such an entity as a Brenner tumour.