samples. If the latter technique is used and calcium is to be estimated spectrophotometrically on a separate acid extract, it would be advisable to add \((\text{NH}_4)_2\text{SO}_4\) to the acid extract before filtration (final concentration of 0.5% is suitable) in order to precipitate any \(\text{BaSO}_4\) solubilized by reduction during the ashing stage. With warm acid and the normal washings, calcium precipitation as sulphate does not present any problem.

Reduction during ashing is found especially where higher than normal concentrations of carbon and phosphorus are encountered. This was first noted in stools containing cellulose phosphate and we had poor recoveries of barium sulphate in these cases until it was counteracted by addition of ammonium sulphate.

Professor C. E. Dent suggested the use of barium sulphate and supervised the method. Thanks are due to Miss Christine Harper, Mrs. Helen Marshall, and Mrs. Mary Forbes who participated in the early stages of the method. The author is grateful to Dr. Lyal Watson for critical discussion and help in preparing this paper, and to Sister Norman and the nursing and dietetic staff of the Metabolic Unit.

REFERENCES

Moreover, they should do so quickly before they and their laboratories find themselves, willy-nilly, at the receiving end of chaos and countless 'routine' smears (from hospital gynaecology and obstetric clinics, V.D. clinics, general practitioners, family planning clinics, local authority well-women clinics, and maternity clinics).

It is this concern which prompted me, at the Annual General Meeting, to move a motion, which was carried, to the effect that the Council of the Association should consider the formation of a committee to review the position on our behalf and make recommendations. The result of the Council's deliberations is awaited with great interest.

R. A. McINROY

REFERENCE

CAPREOMYCIN

Sir,

In May this year a new anti-mycobacterial drug, capreomycin, was put on the market in Britain. There are one or two points about this antibiotic and its use which have prompted queries from some clinical pathologists and which might be of interest to others.

Although its antimycobacterial activity is, in vitro, only slightly less than that of streptomycin, capreomycin is for all practical purposes devoid of activity against other organisms. Its raison d'être is that in tuberculosis cross resistance does not develop between it and streptomycin, nor between it and I.N.H., P.A.S., cycloserine, and ethionamide. It does, however, in varying degree show cross resistance with viomycin, kanamycin, and neomycin so that patients previously treated by these drugs should not be given capreomycin until sensitivity testing has been carried out. In this connexion it may be stated that choice of medium has a very great effect on the minimum inhibitory concentrations obtained. Capreomycin should of course only be used in conjunction with at least one other active agent. Middlebrook no. 7H10 appears to be the best. Egg protein binds capreomycin and media containing it should not be used.

The toxicity of the drug, again, is somewhat similar to that of streptomycin. In the usual dose of 1 gram daily (one million units) eighth nerve involvement is less frequent and overt signs of allergy are less often encountered than with streptomycin, though eosinophilia occurs quite often. The principal toxic effect is on the kidney so that urine analysis and blood urea estimations should be performed at intervals. In the presence of renal disease, capreomycin accumulates rapidly and it is clearly inadvisable to use the drug in such circumstances. Otherwise the drug is less toxic and less prone to give rise to disagreeable side actions than most of the currently available reserve drugs (Tubercle, 1966).

W. H. LYLE

REFERENCE

Book reviews


The present volume will be welcomed for two reasons. The first is the affection and esteem in which Douglas Collins was held by all pathologists: the second is the fact that it fills a much-felt need for a brief introductory textbook on bone diseases. It is not a comprehensive reference book, and it does not, because of Collins' sudden and unexpected death, include a section on bone tumours and dysplasias, but it very usefully presents information on the structure and function of bone and on the morphological and biochemical changes in a variety of bone diseases, including osteoporosis, osteomalacia, endocrine and metabolic conditions, renal osteodystrophy, infections, chemical and radiation-induced diseases, and Paget's disease. The sections on osteoporosis and Paget's disease will be widely read because of the important work carried out by Collins on these topics.

H. A. SISONS


This little book takes the form of a series of papers presented to the 8th Annual Conference on Cancer at the University of Texas M.D. Anderson Hospital and Tumor Institute, Houston, Texas.

The section on bone tumours reviews information on the histogenesis of bone tumours by means of a panel discussion in which the participants are Murray M. Cope- land, Mary Sherman, David C. Dahlin, Charles F. Geschickter, and Henry L. Jaffe, and includes several papers describing the effects of surgery and radiotherapy for bone tumours. Quite apart from the present volume, 'histogenesis' is a much misused term; it properly relates to the tissue, or the cell, of origin of a tumour, but, as noted by Dahlin: 'Proving the cell of origin of any given neoplasm of bone is usually impossible, and current assumptions on histogenesis are based on cytological characteristics of the neoplastic cells, or the products of these cells, or on both factors'. In fact, the discussion on histogenesis in the present volume serves largely to air current ideas on the nomenclature and classification of bone tumours, and shows a reasonable, although not utterly complete, degree of agreement on the meaning of the diagnostic terms in current use following the work of Jaffe and Lichtenstein.

The comparison of the effects of surgical and radiotherapeutic treatment for malignant tumours of bone and soft tissues is still a subject for lively discussion: more information is clearly required. An interesting