Book Reviews

BONE TUMORS. General Aspects and an Analysis of 2,276 Cases. By David C. DAHLIN, M.D., Consultant, Section of Surgical Pathology, Mayo Clinic; Associate Professor of Pathology, Mayo Foundation, Rochester, Minnesota. $11\frac{1}{4} \times 9$ in. Pp. viii+224, with numerous figures. Index. 1957. Springfield, Illinois: Charles C. Thomas, Publisher. Oxford: Blackwell Scientific Publications. Price 87s. 6d.

Important as the surgeon may be as a technician in the treatment of the primary tumours of bone, his contribution to the diagnosis has become of small importance compared with that of the histologist. Even the radiologist's function may often be only that of determining the site of a tumour; for his materials are mere shadows, and they are deceptive. Nevertheless the surgeon remains the dominant individual in the team, for he must have charge of the patient and not only of *the tumour*. "To cure sometimes, to relieve often and to comfort always" is Hippocratic wisdom with particular point in malignant tumours of bone. These thoughts occurred to me when I had finished reading this admirable and detailed survey from the Mayo Clinic which is based upon the studies and records made for so many years by Henry Meyerding and continued by his followers. Dr Dahlin is a pathologist who first gathered this material together for a medical exhibition. It now forms a systematic outline of 2,276 consecutive cases, and apart from being most instructive it is a testimony to the high standards of investigation and recording carried out for so long at the Clinic.

Almost on the first page the author makes a plea for expedition in following up biopsy with definitive surgery and, very naturally, emphasises the Mayo Clinic practice of using fresh frozen tissue sections. The classification follows that of Lichtenstein, but differs in finding little etiological relation of malignant and benign tumours. In each group every aspect (clinical, radiological and pathological) is dealt with in orderly sequence and is accompanied by radiological, gross pathological and histological photographs, and by histograms and diagrams dealing with age incidence and skeletal distribution. There are very few clinical photographs. The principles of surgical and other treatments are discussed as well as prognosis. The material is presented thoughtfully and with commendable conciseness and stimulates interest by being on occasion provocative. "Enchondromas of the hands usually produce no visible swelling." "The only well documented benign chondroblastoma that has undergone malignant transformation was one that had had radiotherapy."

Of giant-cell tumour also there is a suggestion that irradiation bore a significant relation to later malignant change: nevertheless one case is reported of sarcoma developing after curettage without radiotherapy. "Curettage was followed by recurrence in more than 50 per cent"—109 cases of giant-celled tumour. "Grading of these tumours as to degree of malignancy has been of no prognostic value in the author's hands."

There were 469 osteogenic sarcomas: 19 per cent of the patients treated more than five years before survived five years, and 15 per cent of those eligible survived ten years. "Because osteogenic sarcoma is a radioresistant neoplasm, ablative surgical treatment is the procedure of choice." In low femoral sarcomas the need to study the medullary contents at the site of amputation is stressed. Perhaps implicit in this is the answer to the statement that "for reasons unknown, tumors of the tibia were twice as curable as those of the femur, the five-year survival rates being 34.6 and 17.0 per cent respectively." The author throws doubt on the grading of malignancy by the method of Broders. One is tempted to ask if the high percentage of good results is in any way related to the dependence at the Mayo Clinic upon the examination of fresh frozen tissue sections. The high malignancy of Paget sarcoma is once more noted.

Myelomas are given an important place comprising as they do in this series the largest single group of malignant neoplasms of bone. The volume is completed by a chapter on "Conditions that commonly simulate primary tumors of bone"—mostly, of course, the secondary carcinomata. Tumours of the pelvic wall present a specially interesting radiological group, and it would have been well if illustrations of carcinoma of the prostate, Paget's disease and myeloma had been included as well as the carcinoma of the breast.

It seems likely that we shall in future years see an increasing number of malignant tumours of bone. This book is one that should be readily available for reference and instruction in all departments where such cases are studied. The author and publishers are to be congratulated on the excellence of its production.—Norman CAPENER.