

RELAZIONE AL XLI CONGRESSO DELLA SOCIETA ITALIANA DI ORTOPEDIA E TRAUMATOLOGIA. 1956.

TUMORI DELLO SCHELETRO. By Professor I. F. GOIDANICH, Bologna. 11×8 in. Pp. 606, with 571 figures and tables.

I TUMORI METASTATICI DELLO SCHELETRO. By Professor V. PIETROGRANDE, Rome. 11×8 in. Pp. 386, with 257 figures and tables.

The Italian Society of Orthopaedic Surgery and Traumatology faced the reporters of its forty-first congress, which was held at Bologna in October 1956, with a formidable undertaking when it posed the question " Tumours of the Skeleton." The challenge has been met in an outstanding manner by these two magnificent volumes, which combine to form a complete text-book on malignant disease of bone. They must inevitably be consulted by every surgeon proposing to make a contribution about any aspect of this subject. The production of both volumes is superb; they are printed on fine art paper, and the very many reproductions of radiographs and photomicrographs are by no means the least important contribution.

Primary tumours are dealt with by Professor Goidanich on the basis of more than 2,300 such tumours recorded in the register of the Rizzoli Institute, Bologna, and his report consists in a detailed survey of this material. Both benign and malignant tumours are included, the classification being simple and almost uncontroversial. Each different tumour has a chapter to itself that might well stand alone as a comprehensive review. The same pattern is followed throughout. The chapter opens with a brief historical review followed by clinical, radiological and pathological sections; diagnosis, prognosis and natural history are discussed when necessary, and such problems as incidence and distribution are clearly illustrated by diagrams. The sections on treatment, particularly the indications for different methods, are perhaps less detailed than one would like, but the results are tabulated clearly.

Metastatic tumours are presented by Professor Pietrogrande from the Orthopaedic Clinic of the University of Rome with the collaboration of several other institutes and hospitals. He had a difficult problem in presentation, but it has been well overcome by dividing the work into three parts. In the first he describes the normal structure and biological behaviour of bone, and discusses the factors favouring the successful establishment of metastases. The second part is clinical, and here, after a general statistical analysis, the clinical and radiological behaviour of different tumours are detailed. The third section concerns therapy of every type, from surgery to radio-active isotopes. There is an encyclopaedic bibliography.—Philip WILES.

LECTURES ON ORTHOPAEDICS AND THE RHEUMATIC DISEASES. Edited by Marguerite CLARK; presented at The Scientific Conferences, September 29–October 1, 1955, held in connection with Dedication of the New Building of The Hospital for Special Surgery. 9×6 in. Pp. 182, with many figures. 1956. New York City: The Hospital for Special Surgery. Price \$1.50.

The new building to house The Hospital for Special Surgery was formally dedicated in New York on September 29, 1955. This hospital is the distinguished child of the first orthopaedic hospital in the United States, known for so long as the Hospital for Ruptured and Crippled, a name which disappeared in favour of the new one in 1940. The ceremony of dedication was followed by a three-day conference on orthopaedic and rheumatic disorders which was attended by doctors and scientists from the United States, Canada, Europe, Mexico, and South America, and was an outstanding event in orthopaedic surgery in America. Many of the lectures on that occasion are now published for the first time—though in some cases slightly abridged—in this unique volume.

Many international figures in orthopaedic surgery took part in the conference and in this volume we have writings from such well known names as Scaglietti, Judet, Platt and Gallie, besides great Americans like Philip Wilson, Al Shands, Walter Blount and others. And so, even without more said than that, the value of this book can be judged. The volume is in three sections, one on the rehabilitation of the crippled child, a second on clinical problems of orthopaedic surgery, and a scientific section on studies of connective tissue and the rheumatic diseases.

Shands discusses the recent trends in orthopaedic services for the crippled child. He points out that more non-orthopaedic and purely medical problems are being included in the services, with the paediatrician and many other specialists taking more prominent places than in the past. Another trend is the increase in the attention being given to the psychological aspects of the orthopaedic crippled child. An interesting trend is the decline in the population of crippled children in university and metropolitan teaching centres. This is due apparently to the presence of well trained

orthopaedic surgeons in the smaller communities; the children are treated there rather than being sent to university centres, where there is consequently quite a dearth of good teaching material. Platt describes the growth of the residential system for crippled children in England initiated by Sir Robert Jones at Heswall, and later with Agnes Hunt at Baschurch. It is interesting to know that waiting lists for children's orthopaedic beds in England—though he says Great Britain—have almost disappeared.

Paul Colonna describes his modification of capsular arthroplasty for chronic dislocation of the hip. He points out that it is *not* an operation primarily suitable for the subluxated hip but for the congenitally dislocated hip. He shows the results in twenty-six hips, fifteen of which were excellent, six good, three fair and two stiff. The tables describing in detail the methods of treatment at each stage are a good feature of this paper. Platt discusses the late results of closed reduction in congenital dislocation of the hip. In a table he shows the late functional and anatomical results in eighty-six patients (110 hip joints) treated by manipulative reduction. Very satisfactory functional results occurred in ninety-three out of the 110 hips (84 per cent), but the anatomical results were very good in only fifty-seven hips (52 per cent). One most important cause of the poor anatomical results is the not infrequent appearance of osteochondritic changes in the femoral epiphysis after closed reduction. In recent years the trauma of manipulation has been generally accepted as a logical explanation of the vascular disturbance that causes the osteochondritis. Gradual reduction on an abduction frame is used by Scott of Oxford and has resulted in a reduction of the incidence from 25 per cent to 8 per cent.

Robert Ray of Seattle has an interesting article on tissue culture studies of bone growth and metabolism, and McLean, physiologist from Chicago, discusses the physiologic turnover of the mineral of bone. A most striking experimental observation was the rapid disappearance of intravenously injected  $\text{Ca}^{45}$  or  $\text{P}^{32}$  from the blood with its subsequent appearance in the skeleton. This rate of appearance in the bone is too rapid to be accounted for in terms of new formation of bone. In young animals an amount of calcium equivalent to that present in the blood may be turned over every minute; this is a figure beyond all possibility of expectation from information available before the introduction of tracer methods.

This volume is a very happy memorial of a considerable event in New York Orthopaedic circles.—Walter MERCER.

**INTRA-OSSEOUS VENOGRAPHIES OF MEDIAL FRACTURES OF THE FEMORAL NECK.** The residual vascularity of the head fragment in different types of fractures and its relation to the prognosis. By Anders HULTH.  $9\frac{1}{2} \times 7$  in. Pp. 112, with 50 figures and 7 tables. 1956. Stockholm: Acta Chirurgica Scandinavica, Supplementum 214. Price Sw. cr. 20.

The high proportion of femoral heads that become necrotic after fractures of the neck has prompted the study of several methods to determine the viability of the femoral head soon after the injury. Isotopic activity of the head, arteriography and venography are among the procedures now under study and this monograph is another important contribution towards the final solution of this pressing problem, if we consider that more than one-third of all the femoral heads die as a consequence of a fracture of the neck.

The author takes advantage of the ability of the interosseous veins to take over any non-irritant fluid perfused into the bone. He uses 2 millilitres of a 50 per cent solution of Umbril, an iodine contrast medium. A special cannula is introduced through the trochanter up to the femoral neck like the guide of a Sven Johanssen nail. Two antero-posterior radiographs are obtained, one at the end of the perfusion and another two minutes later. The assessment of the condition of the femoral head is based on the speed with which the contrast medium has been removed, at the time the second radiograph is taken.

In general, a *positive* venograph would indicate a healthy head while a *negative* film suggests that the head is dead. Unfortunately, the method does not always give definite information for two reasons. Firstly, only 62 per cent of the perfused heads give a clear positive result, the rest being either negative or doubtful. Secondly, a good positive venograph does not exclude the possibility of a necrotic head, for a permeable arterial system to the femoral head at the time of perfusion does not eliminate the occurrence of the death of the osteocytes during a previous and transient occlusion of the vessels. About half of the necrotic heads were detected by this method, for one-third of the positive and apparently normal venographs corresponded to heads which suffered from aseptic necrosis within the first year of observation.

This is an excellent report on one of the more serious and meticulous works on the subject and the author is to be congratulated for the amount and objectivity of the information it provides on a problem which is in urgent need of a solution.—J. TRUETA.