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Le Osteocondriti giovanili. Cura ed esiti. M. M. Paltrinieri. Relazione al XXXIX Congresso della Società Italiana di Ortopedia e Traumatologia, Napoli, 13-15 ottobre 1954. Firenze, Vallecchi Editore, 1954

Arthur Steindler
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cellent high-power and electron-microscopic pictures. The latter are particularly interesting. They demonstrate collagen fibers under magnifications up to 83,000.

Another chapter deals with the general pathological anatomy of osteochondritis, information being derived from occasional postmortem material and more often from tissue obtained at operations and biopsies. A number of essential features are brought out: the deformation of the femoral head, the long preservation of the joint cartilage, the thickening of the ligaments, and the changes in the synovial tissue; final fissuring and other late degeneration of the cartilage are also mentioned. Notice is also taken of the intense vascularization of synovial tissue, and many other features are discussed. Usually the author is in accord with generally accepted views. The photomicrographs are unusually good, especially those which illustrate the relation between collagen fibers and ground substance. Others show the vascularization of cartilage cells, the penetration of vascular connective tissue into the zones of provisional calcification, the perivascular infiltrations and thickening in really beautiful illustrations.

It was not an easy thing for the author to present an over-all clinical picture of a condition which presents itself in so many different localities. In this respect, the author can hardly go beyond the general statements on age, heredity, distribution, and local signs. In a following chapter, however, a good point is made by demonstrating roentgenographic signs which precede clinical symptoms.

The different phases forming the cycle of necrosis and creeping substitution are well presented from the roentgenographic point of view. Naturally the most substantial part of this report is that which deals separately with the various forms and locations of osteochondritis. Here, as might be expected, osteochondritis of the hip is given the place of pre-eminence. No particularly new features are introduced into the description of the morphological changes, but the photomicrographs showing cartilage, bone, circulatory, synovial, capsular, and nerve changes are excellent and unusually well selected, as are the x-ray studies relating to the course and outcome of Calvé-Perthes disease, of which several good follow-up roentgenograms are shown. Some of these demonstrate convincingly the deformation of the head and the late arthrosis which follows. The reader will meet with the same thoroughness in the discussion of Osgood-Schlatter disease, of osteochondritis of the patella, of Scheuermann's disease of the spine, and of the less frequent Haglund, Köhler, Köhler-Freiberg, and Kienböck's disease.

The more unusual localizations are described in the final chapter; they include such sites as the talus, the os pubis, the phalanges, the sacro-iliac joint, and others, although in some of these it may be difficult to demonstrate the aseptic necrosis, as is the case, for instance, in the sacro-iliac joint, or in the phalanges.

Le osteocondriti giovanili. Cura ed esiti. M. M. Paltrinieri. *Relazione al XXXIX Congresso della Società Italiana di Ortopedia e Traumatologia, Napoli, 13-15 ottobre 1954.* Firenze, Vallecchi Editore, 1954.

This is the last of the three large reports on the subject and also covers all types of osteochondritis, as do the previous reports. In his discussion, the author makes the pertinent remark that a great deal of confusion arises from the fact that the various contributors display the tendency of making a different nosological entity out of almost every case reported. Only a proper grouping of the cases, accompanied by better knowledge of the pathological background, is able to clarify the situation.

After discussing at length the different concepts which are expressed in the literature, the author states his own views, according to which osteochondrosis juvenilis is based on stress or fatigue fractures of the centers of ossification, on the order of Looser's zones, and that the subsequent transformations are based on the discrepancy which exists between resistance and stress. In a special section of the book, this concept is further applied for the different sites of osteochondritis. The first is Perthes' disease, which is also, according to the author, the result of stress fracture. He bases his opinion on statics and muscle stress without, however, going into the question of the selectiveness of the condition. The description of the treatment which he offers is lost in a collection of information obtained from the literature without definite preferences being stated. The same interpretation is given to post-reduction osteochondritis of the hip in congenital dislocation; as is consistent with this view, the abduction treatment in the predislocation phase and open reduction for irreducible or recurrent dislocation appears to be the author's procedure of choice. From this mechanical concept, the logical conclusion is drawn that any patient who has recovered from Perthes' disease is a potential candidate for arthrosis of the hip, a concept to which little objection can be offered.

Another chapter is devoted to Köhler's osteochondritis of the tarsal navicular. Here also the condition is reviewed as a juvenile osteochondrosis based on disequilibrium or disparity between stress and resistance which leads to fatigue fracture.

The same attitude is observed in regard to Köhler-Freiberg disease of the metatarsal head, a condition which also heals in time only to end, like Perthes' disease, in arthrosis. In this particular situation, the author believes in the surgical resection of the head which he has himself carried out in six cases and which, according to him, gives excellent results without disturbing the statics or dynamics of the foot.

The author follows up his traumatic concept in the following chapters, which deal with Osgood-Schlatter disease. He accordingly advocates immobilization in a cast during the painful phase as the treatment of choice. There can be no objection to his attitude nor to his rejection of surgical measures, such as resection of the tibial apophysis or even of metallic fixation.

In the section on Haglund's disease, the same idea of its purely traumatic character as a stress phenomenon is expressed. In consequence, there is the same adherence to conservative treatment. The author definitely states that surgical interference is unjustified — a point with which most of us will agree. Where the traumatic theory of the author is more difficult to accept is in the following chapter on osteochondritis vertebralis or the so-called Delahaye-Scheuermann disease.

This imposing trilogy of reports is a most formidable achievement in point of thoroughness and comprehensiveness. The authors are particularly to be credited with a most careful study of the literature and the attention they paid to the numerous and divergent views in regard to the etiology and the treatment of the different conditions. The extent of the authors' work is clearly demonstrated in their bibliography. This, in fact, is so extensive that a special volume is devoted to the references alone, which contains probably well over 1,500 different items coming from many countries. It is a monumental work and a great testimony to the thoroughness and industry of the authors.

Arthur Steindler, M.D.

PERIPHERAL NERVE INJURIES. By the Nerve Injuries Committee of the Medical Research Council. Edited by H. J. Seddon. (Privy Council. Medical Research Council Special Report Series. No. 282.) London, Her Majesty's Stationery Office, 1954. 2 pounds, 15 shillings.

This valuable book of 451 pages and 276 illustrations contains in many separate chapters careful and thorough reviews of the investigations and work which have been done in the five Nerve Injury Centres in England and the two in Scotland; these Centres have cared for 4,000 cases of nerve injury.

About fifteen separate articles are included, mostly by the associates of Prof. Seddon and largely from the Oxford Centre where extensive and careful work has been done in repairing nerves.

Seddon tells of the standard methods of examining for nerve injury and of recording recovery. He also discusses thoroughly the value of nerve autografts based on his many tabulated cases and the work of his colleagues. His enthusiasm for autografts is well documented.

Sanders shows the value of autografts by photographs illustrating the histopathology and by tabulations of the many cases.

Ruth Bowden writes on the rates of regeneration, the factors influencing functional recovery, and electromyography. She has factually reported the poor results, as well as the good, and has well illustrated the histopathology of the changes in both the muscle and the peripheral-muscle nerve segment. She is not yet convinced of the value of electromyography in routine examinations of injured nerves.

Zachary deals with lesions in continuity, classifies the degree of nerve injury as a guide to indications for surgery, and lists by means of a code system the results of their many repairs of nerves. With guarded enthusiasm he gives nutrition, delay of suture, and length of gap as the three factors that most influence the repair.

Blackwood and Holmes well illustrate the histopathology of nerve injuries, both in animals and man.

Brooks tells of nerve injury by fractures, stating that nine of ten nerve injuries recover without surgery. He gives a rather gloomy report of the success of repair of the brachial plexus.

Barnes writes on the subject of causalgia, stating that presympathetic sympathectomy is the best treatment.

Richards deals with vasomotor and nutritional disturbances and neurovascular lesions. The early warmth in trophic changes he ascribes to paralysis of the vasomotor nerves; the later coldness he ascribes to constriction from the use of adrenalin. He shows that injury to both arteries and nerves results in ischaemic contracture and, in half of the cases, some peripheral gangrene.

Ritchie covers electrical diagnosis.

Sterling Bunnell, M.D.

PRAXIS DER BEGUTACHTUNG UNTER BESONDERER BERÜCKSICHTIGUNG DER UNFÄLLE. Versicherungsrecht, Untersuchungstechnik, Einschätzung. Oberarzt Dr. Simon Mayr. Wien, Verlag Wilhelm Maudrich, 1954. \$6.00.

Dr. Mayr points out in this book that there is in Austria an overwhelmingly high percentage of disabled persons about 500,000 of whom are war casualties. The object of Dr. Mayr's book is to teach non-experienced physicians the necessary fundamentals of evaluating disability. He divides this book into three parts. In the first part, he deals with accidental injuries covered by insurance and the responsibilities of the physicians who treat such injuries. In the second part, he presents in detail the method of examining the patient applying for disability compensation. The orthopaedic aspect in the injuries of such patients is emphasized. In the third part, he describes the various methods of examining single parts of the body and demonstrates instruments for measuring motion and for measuring the extent of function. He suggests ratings for disability to