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Runners' injuries.

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As running and jogging became more popular, so the number of associated injuries increases placing extra burdens on the doctor. Possible causes, diagnosis and therapy are discussed: plantar fasciitis, bunions, hammer toe, interdigital neuroma, stress fractures, corns, nerve entrapment in the foot; anterior and posterior tibial tendonitis, tibial periostitis, tibial stress fracture and acute and chronic compartment syndromes in the leg; chondromalacia, patellar compression syndrome, patellar tendinitis, iliotibial band friction syndrome, fat pad inflammation, popliteus tendinitis, pes bursitis, medial and lateral gastrocnemius tendinitis/bursitis, medial retinacular inflammation, internal derangements, chronic instabilities, and arthritis in the knee joint; hamstring strains; hip pain; back pain. The runner should be taught to listen to his body and the doctor to be prepared to give time. Prevention is better than cure but the doctor should be careful to check that there is no lower extremity misalignment.

(contributed by R. A. Hamilton)

**REPORT ON THE
THIRD COLLOQUIUM ON CLINICAL PROBLEMS RELATED TO SPORT**

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The third Colloquium on Clinical Problems related to Sport was held in the Post Graduate Centre, King Edward VII Hospital, Windsor on 7th and 8th October, 1979, and followed the now traditional pattern of a two day Meeting with six sessions, covering clinical problems related to sport.

The first session opened with a paper by Dr. Dermot Crean, which dealt with Muscle Injury. In this paper he related structure to function, discussing injury and finally rehabilitation with regard to the established function of the injured part. The trend of the paper was to introduce us to an objective evaluation of the traditionally accepted methods of treatment of muscle injuries.

An additional short paper on the value of ultra-sound scanning in relation to deep muscle injury was read by Dr. Archie Young from the Oxford Rehabilitation Research Centre. A vigorous discussion established that we have become too subjective in our response to the methods of treatment used today and it became evident that an in depth evaluation of every method used, particularly in relation to sports injury, was needed urgently.

The second session was a Symposium on the Unstable Knee with as Moderator and principal speaker, Professor E. Eriksson of the Carolinska, Stockholm. His paper dealt with the repair of the disrupted anterior cruciate ligament from the time of the incident to full rehabilitation. With early diagnosis Dr. Eriksson showed the value of immediate arthroscopy. He evaluated the various techniques, showing the improved definition achieved by using carbon dioxide gas, rather than fluid as the medium in which one did the arthroscopic work. Additionally, he questioned the diagnosis of "lone" anterior cruciate tear and explained persuasively both mechanically and from a visual aspect that there is always concurrent damage to the posterior capsule. The main subject of his paper was the operative management of the anterior cruciate tear, the results of which are highly dependent on operative technique. It is essential, as Professor Eriksson showed, to insert the reconstruction or repair as near as possible to the original attachment which is the most posterior aspect on the inside of the lateral femoral condyle. He demonstrated clearly that the majority of uncertain operative end results was due to this insertion being too far anteriorly, which has been shown to inhibit correct knee function post-operatively.

His technique involves the use of the medial one third of the patellar tendon and an attached wedge of patellar bone. The knee joint is entered on the medial side in 90° of flexion through the vastus medialis. Using a guide which he devised, known as the Stille Drill guide, accurate depth into the joint can be gauged to give the most posterior possible attachment. The use of a specially manufactured suture material, which is colour coded allows the correct anterior to posterior alignment with tension during the reconstruction.

Post-operatively, the patient under caudal epidural anaesthesia starts immediate quadriceps control exercise. This technique has been shown to prevent quadriceps inhibition from the outset. Following this, one week is spent in a plaster back slab doing static work. On the seventh post-operative day the patient is put in a cast brace, with an active range from 20° to 60° and encouraged to exercise. He remains in the brace for 4 weeks when the restriction on the brace is removed and the patient exercised actively for a further 2 weeks within the brace. At the end of this period the brace is removed and the patient encouraged to return to full activity.

Following the paper a discussion ensued on the place of dynamic versus stable repair in the knee, in performance athletes. Dr. J. G. P. Williams of Farnham Park presented a short paper on Dynamic Repair using the Augustine Technique for posterior cruciate repair. He discussed eight patients in his series and he presented one at the Conference, who demonstrated the importance of muscle control in dynamic stability.

There was a short additional paper by Mr. Nigel Tubbs from the Birmingham General Hospital on his experience with arthroscopy. His series of 280 cases mirrored other published surveys, emphasising the high degree of diagnostic accuracy that this method affords in experienced orthopaedic hands.

The third session was on Electrodiagnosis in Sport. Dr. Peter Merry, Consultant Rheumatologist from Manchester discussed recent advances in electrodiagnosis and related them to spot diagnosis in sport. His interesting paper, in a highly specialised field, indicated the value of research of modern diagnostic techniques in relation to difficult problems in sport, with particular reference to the nerve compression syndromes.

The second day started with a paper on Injuries of the Lower Limb, when the Moderator and main speaker was Mr. W. McQuillan from the Edinburgh Royal Infirmary. He presented an eloquent paper on orthopaedic problems of the lower limb. His operative management of Jumper's Knee and stabilization of the chronic ankle were probably the two most important aspects covered.

He demonstrated his operative technique of advancement of the origin of the tendon on the patella and he discussed a series of twelve high performance athletes who had been treated by this technique. It was interesting to note that each one of them had achieved or improved on pre-injury best times.

Mr. McQuillan also discussed the problem of the chronic unstable ankle in relation to performance and in discussing the operative techniques of a modification of the Watson Jones repair he demonstrated once again the value of specialist involvement in operative re-construction with regard to sports and their injuries.

The fifth session had as its Chief Speaker Mr. Patrick England, Orthopaedic Surgeon from The Hammersmith Post Graduate Institute who spoke on wrist injuries. In this important paper Mr. England persuasively argued the case for using the diagnostic tests available to their best effect. The value of arthrography in wrist injuries showing particularly rupture of the articular disc bringing the distal radio-ulnar joint into communication with the wrist joint was clearly demonstrated. Additionally X-rays taken in radial and ulna deviation and in flexion, extension and rotation show up pathology not easily demonstrated on routine examination. Mr. England discussed this in relation to traumatic diastasis of the scaphoid from the lunate and he demonstrated very clearly the visual evidence of subluxation and rotation of the scaphoid from the joint itself in certain types of injury. He next analysed his operative technique of repair on the first 8 cases that he had done in relation to their subsequent return to high performance. This is early work and we look forward to other definitive publications of this interesting aspect of sports surgery.

The sixth and final session on Psychological Problems in Sport was delivered by Dr. Maurice Yaffé, Senior Clinical Psychologist, Guy's Hospital, London. In a highly professional dissertation on the subject, Dr. Yaffé set out his thesis demonstrating the links between psychological build-up and performance. He also showed the association with failure and injury arguing the links between the "injury prone" satisfying his psychological needs in injury real or imagined.

He demonstrated the importance of arousal as a function of competition and its relationship to performance in various types of athlete and the value of mental rehearsal.

Finally Dr Yaffé reported on a questionnaire sent to sportsmen and surprisingly showed the high level of satisfaction they accorded to their medical practitioner, all the more satisfying in view of a considerable amount of contrary reporting at this time.

The Colloquium was held under the aegis of the British Association of Sport and Medicine and the British Association for Rheumatology and Rehabilitation and sponsored by Syntex Pharmaceuticals.