

CASE REPORT

LUMBAR LORDOSIS AND STRAIN OF THE ILIO-PSOAS

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This short communication describes a possible relationship between lumbar lordosis and strain of the ilio-psoas group of muscles in one subject, and its subsequent treatment.

The subject was aged 20 and was an experienced and skilled footballer. He had suffered from repeated muscle strain in the groin region over the previous 3 or 4 years. This occurred when forceful flexion of the hip joint was hindered or prevented by contact of the player's boot with the ground, another player or some other obstruction. This condition was disabling, extremely painful and slow to heal, usually requiring a recovery period of from 6 to 8 weeks. It was also the subject of many different diagnoses and was variously treated by rest, local heat, physiotherapy, injection of cortisone and hyaluronidase. The condition continued to recur on a regular basis and the recovery period was little affected by any of the above treatments.

It was later found that the player suffered from marked lumbar lordosis, scoring "one" on the New York State Posture Rating Chart (New York State Education Department, 1958). Since one of the factors contributing to this condition is shortness of the iliacus and psoas muscles (Rasch and Burke, 1971, Wheeler and Hooley, 1969, Morehouse et al, 1950), the subject was given a set of exercises for correction of this condition. The resulting postural changes are shown in Figure 1.

The footballer appeared less prone to groin injury after this improvement in his lordosis and did not experience the injury again for eighteen months. When it did occur again the condition was mild and the subject was able to resume playing after four days of heat treatment. The iliopsoas group of muscles was shown to be involved in the injury as described by O'Donoghue (1971).

DISCUSSION

Strain in the region of the groin is a common injury, and for some unknown reason soccer players and Gaelic footballers appear particularly prone to it. An informal survey amongst 100 students of physical education indicated that 11 suffered regularly from the condition, the injury occurring as previously described. Since none of these subjects was suffering from the condition at the

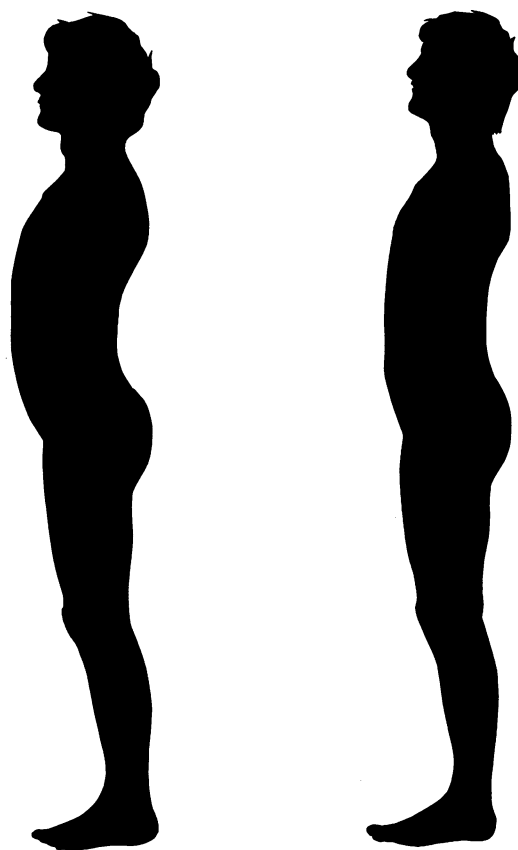


Fig. 1. The subject while troubled by frequent strain of the ilio-psoas muscle group (left) and after a course of exercises (right). (The silhouettes were made by photographs by lithographic tone elimination and reversal.)

time it was not possible to establish a connection with the ilio-psoas muscles. On examination of these athletes' postures, it was found that all suffered from a marked degree of lordosis and that a positive correlation appeared to exist between the degree of lumbar lordosis and the frequency and severity of groin strain. Some caution is probably necessary before linking these facts since lordosis appears to be a very common condition in the general population (Schwartz et al, 1931), although not apparently in track and field athletes, to judge from

the results of Tanner (1960). Also a number of subjects who suffered from marked lordosis reported no history of groin strain. Thus any relationship between the two conditions is likely to be complex and is the subject of a more extended investigation.

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OBITUARY

Thomas Maitland Gibson, M.B., Ch.B., S.B.St.J.

Although we have quite a few former athletes and rugby players among our members, I think Tommy Gibson was the only one we have acquired from first division association football. In the mid-1920's, he was "spotted" by Leicester City, and after qualifying in Glasgow in 1927, and working as E.N.T. house surgeon in Glasgow Royal Infirmary, he came to Leicester to play football. He later entered general practice in Mountsorrel, between Leicester and Loughborough, until his "retirement" in 1969, when I took his place in the practice. He continued to work in the area, as medical officer to the Brush Electrical Engineering Works, to the Glenfrith Hospital for the mentally defective, and above all as County Surgeon for the St. John Ambulance Brigade. He died suddenly yesterday morning, 72 years old, only some few hours after he had attended to his duties at the Glenfrith Hospital, and of course after seeing Leicester City play later that afternoon.

Tom was a member of B.A.S.M. from 1964, and served in the background of the Association's affairs, especially in the early days when we met at Loughborough, and could depend on Tom's support, advice from his experience of training St. John Surgeons and ambulance personnel, and in looking at sports injuries from the player's viewpoint. He always gave an honest "feed-back" upon each number of the Journal and I valued his opinion. He helped to make my own entrance into general practice smooth, and I shall miss an old and very valued friend.

7th October, 1974

H. Evans Robson