

GROIN PAIN

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Introduction

The injury of the muscular-tendon union or of the periosteum-tendon union (entesopathy of the adductor longus) causes Groin Pain, one of the most common pathologies among athletes who do hard work with the lower extremities. Pain in one or both groins is the main clinical symptom. It could be constant or after a football match. The diagnosis is made according to the clinical symptoms, the x-rays in the initial stages are usually negative and the test of the adductors is positive. The treatment in this Acute Stage is: rest; cryotherapy; physiotherapy and rehabilitation stretching exercises according to tolerance. It is not recommended to carry out deep massages to the adductor longus. When pain reduces, begin functional activity.

If the factor persists, begin the Chronic Stage and this is known as Pubic osteopathy which is defined in view of the medical history, the age of the patient and the duration of sporting activity and the symptoms which occur during or following exercise and continuously.

To do the diagnosis the following are important:

1. Clinical exam of the Adductor and abdominal muscles and tendons, the Pubic symphysis, the Groin folds and inguinal rings, the Ischium and to perform the Valsalva's manoeuvre.
2. Complementary exams: a) Radiological (Rispoli's Classification); b) CT Scan (4 grades of capture); c) Ultrasonography; d) Endoscopy.

It is always important the Differential Diagnosis with: avulsion and stress fractures, muscular, muscular-tendon and tendon-periosteum injuries, acute tendonitis, psoas bursitis, snapping hip, trapping of iliopsoas tendon against the pectineal eminence, tensor fasciae latae over great trochanter, myositis ossificans, tumours, sacroileitis, epiphysiolysis, Perthes, labrum lesion, traumatic synovitis, pigmented villonodular synovitis, osteochondritis dissecans, loose bodies, disc injury, spondylolysis, spondylolisthesis, groin-crural hernia, defects in the posterior wall, trapped nerves.

The Chronic Stage treatment is: rest, medical treatment, physiotherapy, rehabilitation and Exam of the lower extremities. When the obtained results are fair with conservative treatment, it is recommended to carry out surgery as bilateral tenotomy of the adductor longus, or bilateral tenotomy of the adductor longus and reinforcement of the posterior abdominal wall.

This work is to present the treatment and the results obtained in two patient series of the "Mutualitat de Futbolistes Catalans".

Methods

657 patients with groin injuries were treated in the "Mutualitat de Futbolistes Catalans" between October 1991 and May 1995. Only 109 (17%) needed surgical treatment which was tenotomy of the adductor longus (107; 16%) and in 2 others tenotomy of the adductor longus & Pérez-Fontana-Broggi Technique. A second group of 461 patients was also treated in the "Mutualitat de Futbolistes Catalans" between 1997 and 2002. 221 (48%) patients were treated surgically with tenotomy of the adductor longus (176; 38% Group II A) and tenotomy of the adductor longus and laparoscopic mesh (45; 10%) Group II B).

Results

The complications of the I Group of the surgically treated patients were: residual postsurgical pain (8; 7%); adhesions rupture (12; 11%); recurrence (2; 2%); second surgical procedure (1; 1%). The recurrences were resolved with Conservative Treatment and the residual postsurgical pain was reduced after 4 months with Conservative Treatment also.

The Complications of the II Group (221 Patients: Groups II A & B) were: residual postsurgical pain in Adductor (5; 2%); in abdomen (2; 1%); adhesions rupture (31; 14%); haematoma (6; 3%); previous surgery in other centres (4; 2%); abdominal pain (1; 0.5%).

Conclusions

The relation between incipient groin hernias and Groin Pain appears broadly contrasted in numerous bibliographic



The Rehabilitation of Sports Muscle and Tendon Injuries

references. The systematic ultrasonography exam of the painful groin area is an accurate method for the diagnosis of incipient hernias.

For the athletes, laparoscopic mesh is a surgical technique which allows the aetiology of the injury to be known. The preherniary lipoma acts as a battering ram which, using pressure due to force, expands the internal orifice of the groin canal, affecting the genital branch (80%) of the genitofemoral and the ilioinguinal nerves causing the pain.

The high family history incidence in groin hernias (70%) in the second group studied (II B), permits the conclusion that lipoma is hereditary and that these athletes would have developed groin hernias between the 4th and 5th decades of their lives, but due to their sporting activities, this time is brought forward. Adductor longus muscle-tendon injury is the principal problem in the Dynamic Osteopathy of Pubis.