

**OSTEITIS PUBIS IN ATHLETES**  
**Intermediate and Ending Phase of Rehabilitation**

*Parazza , Bertacchini P, Romani D, Romeo A, Vanti C, Viti C*

*Gruppo Terapia Manuale A.I.FI. Emilia Romagna*

**INTRODUCTION**

The Purpose of this poster is to develop an appropriate protocol of Physiotherapeutic intervention for the treatment of Osteitis Pubis (OP) in its intermediate and ending phase as long as it has been well diagnosed and other causes of groin pain have been ruled out.

Relevance: Groin Pain is a common presentation in athletes, especially in those involving kicking, twisting, turning such as soccer, football, hockey and running sports. In the differential diagnosis of all groin dysfunctions OP is quite common, and although it is considered a self-limiting disorder, many conservative approaches has been recommended in the literature.

Some authors suggest that by applying a correct and progressive rehabilitative program it is possible to reduce the time of recovery and get back to the specific sport earlier.

**METHODS**

The treatment of the acute phase of this condition has been neglected because at this stage complete rest seems to be the best treatment to administer, therefore it has been considered not to be of importance from a Physiotherapist point of view.

Databases employed: A research of the sole English literature over the past ten years has been undertaken on the attempt to find relevant information on the best treatments and methods available. The research has been done in MedLine, Pub Med, Cinahl, Ausportmed, Ebscohost and AMED databases.

Evidence Dimensions: All the relevant papers in the Hierarchy of evidence have been comprised, including RCT's, experimental and observational studies, review papers and case studies. The reason of this is that there are very few good quality studies looking at the effect of exercise and manipulative Physiotherapy in the treatment of OP, therefore all the reference material is considered to be important.

Including Criteria: Manual Therapy, Rehabilitation, Treatment, Differential Diagnosis, Assessment, Exercise, Groin Pain, Osteitis Pubis, Bone Marrow Oedema.

Excluding Criteria: NOT Surgery, NOT Infection, NOT Rheumatologic Diseases, NOT Drugs.

Limits: English Literature, Period 1993-2003, All kind of availability included (Abstracts, Full text, PDF, EBM reviews).

**DISCUSSION**

The OP has always generated a lot of confusion, due to variability of its clinical presentation. There are many investigative procedures which can be useful to the clinician to correctly diagnose OP (X Rays, Bone scan, CT scan, MRI). However, the literature agrees in saying that there are some good reliable and specific tests and some clinical signs which help to diagnose it clinically. The same tests and signs can be used together with investigations in order to predict the recovery time, and also throughout the process of rehabilitation. A core stability module is set out (pelvic floor stability, Lumbo-pelvic stability and functional control), followed by a module addressing the regain of normal length and strength of the muscles which attach to the pelvis. In one of the very few RCT's comparing the effectiveness of a passive versus an active physiotherapeutic protocol, it was found that adductor strengthening gave better outcomes than adductor stretching. It was thought that adductor stretching could potentially undermine, by pulling, their insertion at the pubic bone. The Physiotherapist is central in the process of educating, teaching, and assessing the patient in this phase, and clinical reasoning is applied prior and after the training session. In fact the adverse load on the pelvis increases tone of adductors thus creating a lack of core stability. The change of pain in response to the specific pain provocation tests and adductors guarding will guide the Physiotherapist towards the necessary modifications in the management of OP. It is also important to address abnormal hip, lumbar spine and pelvic biomechanics, as well as commencing pain free activities which does not place an excessive stress on Pubic Symphysis. Further steps are to begin with 100 metres running drills, followed by lateral running drills, then to introduce cutting and turning drills. After each training session the patient is

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subjected to continual appraisal by using the above-cited tests. If one of these tests is positive the next exercise is modified accordingly. The following two modules are the commencement of kicking, only after all other drills proven to be pain free, and a gradual return to competition. The latter step is not considered in this poster.

### CONCLUSION

From an attentive review of the English literature available over the past 10 years, it appears clear that groin pain is a quite complicated issue. This symptom is accompanied by signs, and only with a meticulous attention and thoughtfulness to an acute injury, or acute onset, and with a thorough assessment and differential diagnosis, the clinician should be able to correctly address the right treatment and management for the athlete. This applies also on OP, and a correct program of rehabilitation set out by the Physiotherapist should avoid a compromised recovery. The progressive return to the patient activity is determined by the severity of the physical signs and the response of those signs to the exercise. Based on the current literature and works, a program for intermediate and ending stages of rehabilitation has been designed.

### REFERENCE LIST

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