



## Electro -Acuscope -Myopulse and Laser Therapy in Athletic Pubalgia

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### Introduction

"Athletic pubalgia" is a term often used to describe the insidious onset of groin pain in athletes and it may be caused by a range of musculoskeletal and nerve conditions accompanied by lower-abdominal or inguinal pain. The rectus-adductor muscle syndrome and the myalgic-radicular syndrome (irritation of T12 and L1 anterior nerves) are the most frequent causes of pubalgia in inguinal zone. The current therapy is various and it may result ineffective or difficult to plan. We propose a double approach: the use of high-power laser therapy Nd-YAG in association with Electro -Acuscope -Myopulse application.

### Methods and Materials

We report a 6 years study in which 250 cases of athletic pubalgia were investigated. All the patients were treated with high power laser therapy Nd-YAG (35 Watt power, Neodymium-doped Yttrium Aluminium garnet source): it has analgic, biostimulant, antiinflammatory and antiedema effect due to its high penetrating light. We used also AlGaAs Semiconductor Laser (4,1 power, double source 810+980 nm) to enhance the analgic action.

The Electro-Acuscope and Electro-Myopulse are innovative instruments of therapy that can be usefully addtionated to laser therapy. Acuscope is a neural electrical stimulator that has microchips tuned to read and treat nerves after registration of nerval irritation by superficial electromyography. It was used in myalgic-radicular cases. Myopulse is a muscular electrical stimulator that has microchips tuned to read and treat rapidly acute soft tissue injuries (contractures, tendonitis ect). It was used in rectus-adductor muscle syndrome. Physical rehabilitation, concerning stretching and posturing, was prescribed at the end of the cycles application.

### Results

The 90% of patients treated with this protocol resolved lesion in one month and the symptoms decreased rapidly furthering the re-starting of sports activity.

### Conclusion

We conclude that the association between laser therapy and Electro -Acuscope -Myopulse is the best choice in athletic pubalgia syndrome.