

## Treatment of inflammatory bursitis of iliopsoas.

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## Purpose

The bursas are flattened sacs that act as a protective cushion, overlap between the bones and muscles (deep bags) or between bones and tendons / skin (superficial bags).

These synovial sacs are filled with small amounts of liquid to facilitate movement during muscle contraction.

The deep bags, such as subacromial and iliopsoas bag, are located in the band.

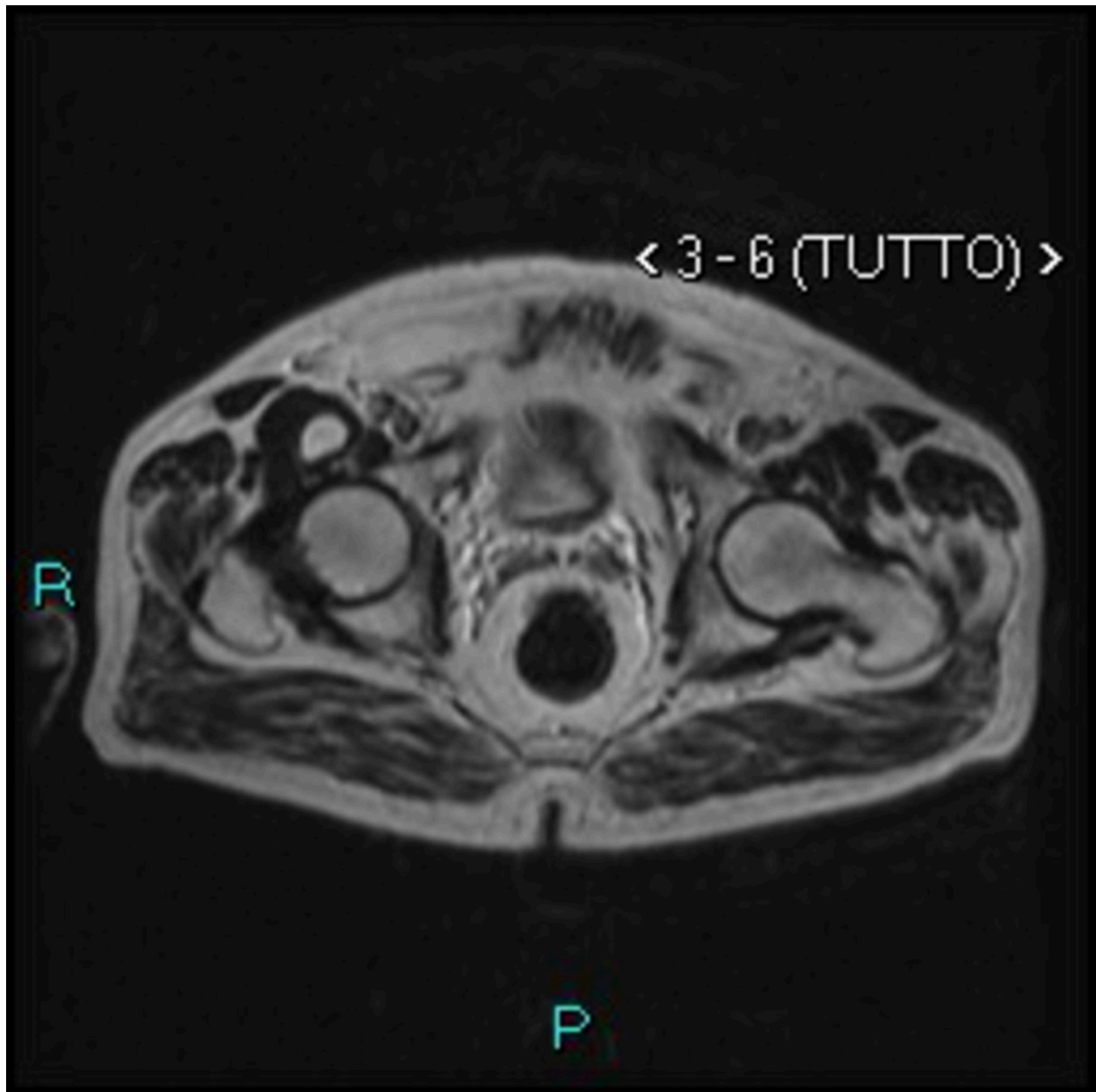
The surface bags, such as the olecranon and prepatellar, are located in the subcutaneous tissue.

Humans have about 160 bags.

The bag of iliopsoas is the largest bursa in the body and communicates with the hip in 15% of people.

The aim of our study was to analyze the effectiveness of ultrasound-guided injection of corticosteroids in inflammatory bursitis of iliopsoas by testing pre- and post-treatment RM imaging and evaluating the VAS scale.

Images for this section:



**Fig. 1:** MR SE T2

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## Methods and Materials

The protocol was approved by the hospital's board and informed consent was obtained by all patients.

From June 2008 to September 2011 we evaluated 12 patients with iliopsoas bursitis diagnosed by MRI imaging performed before and two weeks after treatment.

The MR's sequences used were standardized: SE T2, T2 FAT SAT and T1 axial and GRE T2 coronal.

All MRAs were performed by two experienced Consultant Musculoskeletal Radiologist.

The images were interpreted by the same Radiologists.

In all cases the intra-articular injection was performed US-guided under sterile conditions, using an anterior approach.

All patients underwent suction of the bursa of iliopsoas (10 cc on average), and subsequent intrabursal infiltration of corticosteroids and local anesthetic, in ratio of 70% -30%, under ultrasound guidance by using needles from 20 to 22 G.

The volume injected depended on the capacity of the bursa.

The procedure was well tolerated by all patients and there were no reactions or side effects observed.

All patients underwent the VAS scale one day before and two weeks after treatment.

Images for this section:



**Fig. 2:** GRE T2

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## Results

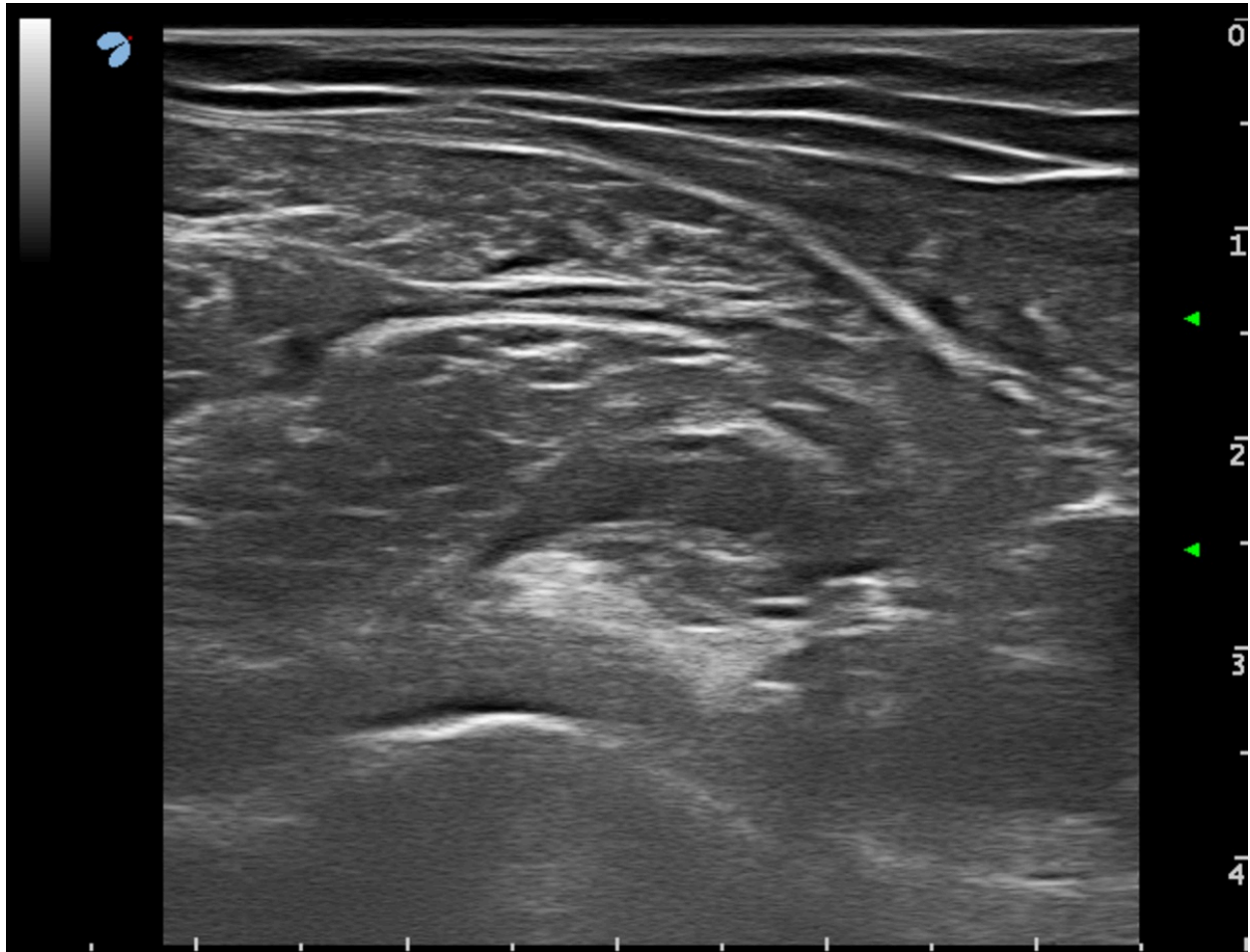
From the comparison of the MR imaging of bursal dimensions by two different radiologists, respectively with 22 and 4 years of experience, in double-blind study, before and after treatment, we appreciated a complete resolution of bursal detention in 11 of 12 patients and a volumetric reduction of the 60% in 1 of 12 patients.

The VAS scale underwent a reduction from a mean value of 7.6 pre-treatment to 1.3 post-treatment; pain did not change only in 1 of 12 patients.

## Conclusion

Having regard to the clinical results strongly positive, the low cost and the rapidity of intervention we can say that the US-guided treatment by aspiration of the effusion and infiltration of corticosteroids in the bursa of iliopsoas is an optimal method for the treatment of this pathology. This research is an indication of the treatment and opens the way to further interventional - radiological's studies.

Images for this section:



**Fig. 3:** Echography

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