Case Report

An Unusual Cause of Groin Pain in a Young Elite Soccer Player: A Case Report

Clausen SH1*, Bolvig L2,5, and Fredberg U3,4,5

1Department of Radiology, University of Southern Denmark, Denmark
2Department of Radiology, Aarhus University Hospital, Denmark
3Diagnostic Centre, University Research Clinic for Innovative Patient Pathways, Denmark
4Department of Rheumatology, University of Southern Denmark, Denmark
5Stadium Clinic, Aarhus Stadium, Denmark

Abstract

An urethral diverticulum is a rare pathological condition in male patients. However, in this case, a urethral diverticulum was the cause of groin pain in a young elite soccer player. His only symptom was groin pain during physical activity. At first the pain was thought to be due to adductor tendon injury, and the patient was treated conservatively with manual therapy, stretching, and slowly increasing strength training of the adductors for a half year, with no change in symptoms. He then underwent surgery for a sports hernia, also with no effect on the pain. A thorough ultrasound examination revealed a urethral diverticulum and the patient was treated surgically. He became free of pain and was permitted to resume sports activity after a few days. The aim of this case report is to present a common symptom that had a very uncommon cause.

INTRODUCTION

Groin pain is common among athletes, especially soccer players [1]. Groin injuries account for 2% to 5% of all sports-related injuries and have a high recurrence rate (15% to 31%) [2]. In a recent study, they seem to be even more common in male soccer players than previously reported. In 240 players, the average weekly prevalence of any groin problem and substantial groin pain for all male soccer players was 29% and 10%, respectively [3].

Many diseases with different etiologies can cause groin pain [4], which sometimes makes the diagnosis and treatment of groin pain in performing athletes a challenge.

An urethral diverticulum is a rare pathological condition in male patients. The most common symptoms associated with urethral diverticula include recurrent urinary tract infection, urinary dribbling, incontinence, and a weak urinary stream.

The corpus spongiosum contains the urethra and is placed ventrally in the penis. An urethral diverticulum in the corpus spongiosum is a condition that rarely affects men [5].

It is often due to the formation of a pouch or dilatation at the level of the urethra, most likely from an acquired origin (90%).

An urethral diverticulum is mostly found at the penile level and especially at the penoscrotal angle.

CASE PRESENTATION

The patient was a 17-year-old elite soccer player at the national level. He had experienced activity-related groin pain on both sides for 9 months that made it impossible for him to participate in training or matches. He could manage a short run (20 minutes) at low speed before the pain appeared. He had no previous urogenital complaints and had not experienced pain like this in the past. There was no pain at rest, and no injury in relation to the onset of symptoms. The pain was considered to be due to an adductor tendon injury, and he was primarily treated conservatively with manual therapy, stretching, and slowly increasing strength training of the adductors for a half year, with no change in symptoms. He then underwent surgery for a sports hernia, also with no effect on the pain.

PHYSICAL EXAMINATION

Normal movement of the hip joints without tenderness. No pain at maximum flexion-adduction of the hips. Tenderness when palpation of the iliopsoas insertion and activating the iliopsoas muscle, but no pain response related to the rectus femoris, sartorius, rectus abdominis, or the pubic symphysis.

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ULTRASOUND EXAMINATION

Irregularity of adductor insertion on the right side; the left side was normal. The iliopsoas tendons were unremarkable,
including their insertion at the trochanter minor. The pubic symphysis was irregular without Doppler activity.

The scrotum was normal, with veins of normal size. A cystic process (2.3 cm) was seen in the corpus spongiosum of the penis, and the groin pain could be triggered from there by transducer pressure during scanning (Figure 1)

**ULTRASOUND CONCLUSION**

After the diagnosis of the cyst, when asked directly, the patients reported a slight discomfort on erection, but did not feel the need to consult a doctor.

**TREATMENT AND OUTCOME**

The patient was treated surgically. Under general anesthesia, the diverticulum was accessed through the urethra and surgically opened toward the urethra. In this way it could empty itself, and would not constantly fill with urine.

The patient became free of pain and was permitted to resume sports activity after a few days. Three months later, he was still without any complaints and participated in training and soccer without limitations.

**DISCUSSION**

The most frequent causes of urethral diverticula are recurrent urinary tract infections, long-term catheterization (implanted catheter), trauma of the urethra (recurrent catheterizations or surgical gestures), and iatrogenic wounds of the urethra.

In both congenital and acquired urethral diverticula, patients usually present with pain, scrotal edema, postmicturition dribble, and a susceptibility to urinary tract infections [5]. The primary treatment for urethral diverticulum is surgical.

A urethral cyst is an uncommon finding. Nevertheless, this case is a reminder to look beyond the obvious disease area if a patient’s symptoms are not relieved as expected. In this case, the cause of the patient’s symptoms was found as the result of a thorough ultrasound examination, which revealed an unexpected finding.

**ACKNOWLEDGEMENTS**

Bolvig L, Department of Radiology, Aarhus University Hospital, Aarhus, and Stadium Clinic, Aarhus Stadium, Aarhus, Denmark – to carry out the ultrasound examination. Fredberg U, Diagnostic Centre, University Research Clinic for Innovative Patient Pathways, Silkeborg Regional Hospital, and Department of Rheumatology, Odense University Hospital, University of Southern Denmark, and Stadium Clinic, Aarhus Stadium, Aarhus, Denmark – to carry out the physical examination.

**REFERENCES**