Snapping hip disabling: About an observation and review of the literature

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Abstract

The snapping hip is a common pathology in sports. Of diverse etiology, we report a case of postoperative disabling hip dislocation in a 25-year-old patient. The problem posed by the management of this pathology was that of recurrence after surgical treatment. In our clinical case, the use of medical treatment has put an end to pain and major functional impotence.

Keywords: Snapping hip - disabling - iliotibial band

Introduction

The snapping hip is a common pathology in sports. Of diverse etiology, we report a case of postoperative disabling hip dislocation in a 25-year-old patient. The causes found in the literature are multiple, including tendon or fascial trauma, bursitis, musculoskeletal abnormalities, and defective arthroplasty [2, 3, 4, 5]. Ultrasound by its dynamic character remains the first choice examination to confirm the diagnosis of hip resection [1, 5, 6]. Its treatment is primarily medical, rarely surgical [2]. We report a case of disabling hip dislocation, requiring first-line surgical treatment.

Observation

A 25-year-old female student with no known medical and surgical history, was admitted to the surgical emergency department of the Brazzaville University Hospital on February 2, 2017, for right hip pain, accompanied by functional impotence of the right pelvic limb resulting from a road accident. Clinical investigations in the emergency department, x-rays revealed no fracture and no dislocation of the right hip. The patient was successfully put on medical treatment with analgesics and NSAIs and discharged from the hospital. Seventy-two hours later, the pain in the right hip reoccurred, causing crippling lameness, forcing the patient to use a walking stick. Upon admission to the Traumatology- Orthopedics department on February 5, 2017, the anamnesis reveals that she was struck by a car on her right side with a projection on the ground. During physical examination we noted an external projection audible, visible and palpable to passive and active mobilization of the right hip. Dynamic ultrasound of the right hip revealed an external projection at the expense of the right iliotibial band. Given the importance of disability, surgical treatment was indicated to restore the patient to normal and independent walking. A relaxation of the right iliotibial band was performed by the Brooker technique by making a cross section and the attachment of the banks on the greater trochanter with “vicryl 2” [7]. The postoperative course was without particulars. Eight months after the surgical treatment, the patient presented a recurrence of the snapping and this time, the recurrence was treated by infiltrations and functional rehab sessions. At the last follow-up, 1 year of recurrence and after medical treatment, the external projection completely disappeared and the patient recovered normal walking.

Discussion

The snapping hip is a clinical entity, benign and frequent in the sport population [1, 2]. There are three types of hip projections in the literature: extra-articular projections or external projection
of the ilio-tibial band on the greater trochanter \(^{[2, 8]}\); the intra-articular or anterior projection of the iliopsoas tendon on the iliop-pectinated eminence \(^{[9]}\) and the posterior projection due to the subluxation of the tendon of the long portion of the crural biceps on the ischial tuberosity \(^{[10]}\). The first form was described by PERRIN and Morel LAVALEE \(^{[11]}\) in 1859, the second form by NUNZIATA and BLUMENFELD in 1951 \(^{[6]}\) and the third form by Rask in 1980 \(^{[8]}\). In our case, hip resurfacing was extra-articular at the expense of the ilio-tibial band.

Regarding the mechanism of appearance of the hip projection, sudden and repeated hyper-extension is the most common mechanism seen especially in the practice of sports activities such as gymnastics, classical dance or martial arts \(^{[10]}\). Sex is not considered as a risk factor, but some authors report a female predominance as early as adolescence \(^{[11]}-^{[12]}\). Clinically, the instability is often known to the patient and is almost always painless in its anterior form \(^{[13]}\). The diagnosis of hip resection is clinical and para-clinical. Dynamic ultrasound is the examination of choice according to the data found in the literature \(^{[1]}-^{[6]}\). Therapeutically, the treatment of hip resection is primarily medical by administering analgesics, anti-inflammatories or by performing infiltrations, otherwise physiotherapy sessions may be considered with generally good results \(^{[5]}\). On the other hand, conventional surgical treatment \(^{(7, 14)}\) or arthroscopy \(^{(15)}\) remains an exceptional indication. Several techniques have been proposed: The relaxation of the strip by Zoltan wide oval resection, either by a cross section Brooker, or by an oblique section Bruckl, or by a Z-plasty Deterich. In our clinical case, the treatment was surgical because of the importance of the affected hip pain and the total inability to walk. The recurrence observed at the eighth month of the surgical treatment in our patient could be explained by the fact that the trans bone fixation of the banks on the greater trochanter was carried out with resorbable threads. However, the surgical treatment does not protect against failures by reproduction of the projection or persistence of pain \(^{(16)}\).

**Conclusion**

The resection of the ilio-tibial band on the greater trochanter can be invalidating by the intensity of the pains and the recurrence. In our observation, the recourse to first-line surgical treatment resulted in recurrence. Also medical treatment was the only alternative to end pain and major functional impotence.

**References**