## **Case Report**

DOI: https://dx.doi.org/10.18203/issn.2455-4510.IntJResOrthop20223464

# An interesting case of external type of coxa saltans treated by z plasty of iliotibial band-a case report

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**Received:** 03 November 2022 **Revised:** 02 December 2022 **Accepted:** 07 December 2022

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#### **ABSTRACT**

Coxa saltans commonly known as snapping hip is a nagging illness which can physically and mentally hinder patients life. A snapping hip (coxa saltans) secondary to a tight iliotibial band rarely needs surgical release since most cases respond well to conservative management. The purpose of this study is to present the surgical results of refractory external-type snapping hip by Z-plasty of the iliotibial band. We present a case report of 47-year-old lady who was diagnosed to have snapping hip of external type who was treated with Brignall and stainsby technique of Z plasty. The surgical results of Z-plasty are excellent and predictable. Careful examination is necessary to rule out other causes. Z-plasty is recommended as an effective surgical treatment of the refractory snapping hip.

Keywords: Coxa saltans, Snapping hip, Z plasty, Iliotibial band, External snapping hip

#### INTRODUCTION

Coxa saltans commonly known as snapping hip is a nagging illness which can physically and mentally hinder patients' life. Many types coxa saltans are a symptomatic which just a clicking sound without any pain. Once the pain factor originates, it can provide hindrance to activities of daily living. So, it is essential to identify and diagnose this illness clinically and radiographically to avoid mistreatment and late complications.

#### **CASE REPORT**

A 47-year-old lady presented with complaints of clicking sound over left hip associated with pain for more than 2 years. Symptoms initially were pain free with just a visible clicking sound over left hip over lateral aspect on flexion and extension of hip, gradually progressed to audible click associated with pain. Patient has difficulty in using Indian restroom, climbing stairs and walking for a long time. There was no history of trauma or fever. There was no sinus or discharge over the left hip region. Patient

has undergone non surgical management previously in form of analgesics, physiotherapy but there was no relief.

On physical examination, visible and audible snapping/slipping movement noted over the left hip region when hip was moved from flexion to extension. Ober's test was positive on left side. There was no restriction to hip movements. Neurovascular examination was normal.

XRAY pelvis with bilateral hip was taken to rule out any hip pathology and intra articular loose bodies. Radiograph showed normal hip joint with no fracture line or deformity. Neck shaft angle was measured to be approximately 128 degrees.

Patient was clinically and radiologically diagnosed to have left snapping hip external type due to iliotibial band irritation over greater trochanter.

Considering the duration of illness and poor response to conservative management, it was decided to treat surgically. Patient was taken up for Left iliotibial band Z

plasty lengthening as proposed by Brignall and stainsby. Under anaesthesia, patient was put on right lateral position, incision was made over lateral aspect of left hip overlying the greater trochanter. Soft tissue dissected. Ilitibial band identified and marked. Gluteus maximus was released. Z plasty was planned with skin marker and proceeded in a step wise fashion. Intra-operatively after the procedure, snapping was not seen. Post operative routine protocol followed. Patient mobilised on POD 1 with Walker support. Do's and don'ts explained to the patient. Physiotherapy started. Patient was discharged on POD 2.



Figure 1: Location of snapping which was audible and visible.

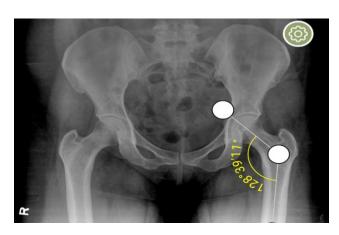


Figure 2: X-ray pelvis AP view.



Figure 3: X-ray hip lateral view.

#### **DISCUSSION**

Snapping hip or coxa saltans though not a surgical emergency, is a cumbersome illness causing hindrance to patients daily activities. Most of the snapping hips are asymptomatic without any pain and are usually treated non operatively.<sup>3</sup> Few cases are associated with pain mainly due to iliotibial band rubbing over the greater trochanter during flexion and extension. Position of iliotibial band remains same but it is the greater trochanter that is mobile causing symptoms. Usually, pain arises due to chronic irritation and associated trochanteric bursitis. Obers test is positive in external type of snapping hip due to iliotibial band contracture. Such resistant cases need surgical management for release of iliotibial band contracture. As shown in several studies. 4-6 Technique of Z plasty given by Brignall and Stainsby provide good results in symptomatic cases and early return to normal life. Though arthroscopic techniques have advantages of minimally invasive ness and less soft tissue dissection, open Z plasty is still routinely used due to clear identification of landmarks and easy learning curve compared to arthroscopic technique.<sup>7</sup>-<sup>9</sup> Interpretations obtained are similar to those shown in previous studies.<sup>6</sup> Our patient showed good symptomatic relief following surgery with complete resolution of previous symptoms.4-6

#### **CONCLUSION**

Snapping hip or coxa saltans is a clinical diagnosis which needs shrewd attention in outpatient clinic for early detection and treatment. Treatment with Z plasty of iliotibial band for external type snapping hip has proven to be a effective treatment choice for symptomatic cases.

Funding: No funding sources Conflict of interest: None declared Ethical approval: Not required

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**Cite this article as:** Sameer MM, Baskaran SS. An interesting case of external type of coxa saltans treated by z plasty of iliotibial band-a case report. Int J Res Orthop 2023;9:210-2.