# Interstitial Inguinal Hernia In Women: An Exceptional Anatomic Variety.

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**Citation**

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**Abstract**

Interstitial inguinal hernia is a rare anatomical variety of hernias of the inguinal region. Diagnosis is rarely made preoperatively. We report the case of a 52-year-old patient who presented challenges of differential diagnosis with a Spigelian hernia.

## INTRODUCTION

Interstitial inguinal hernia is a rare type anatomically. The hernia sack passes between the muscular-aponeurotic layers of the anterior abdominal wall. It belongs to a large group of interparietal hernias described for the first time in 1661 by Bartolini [1]. There is often a problem of differential diagnosis with Spigelian hernias. We report a case observed in a woman whose diagnosis was made only during surgery.

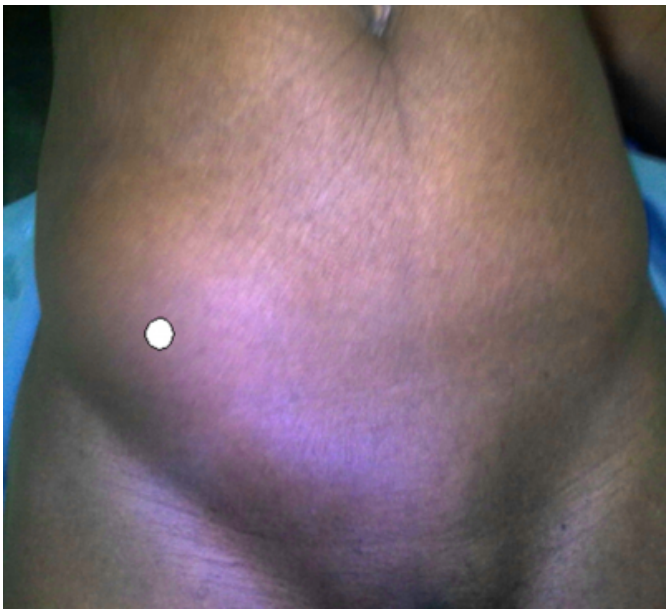
## CASE REPORT

A 52-year-old woman (gravida 5, para 5) consulted our department for an inguinal and right iliac fossa swelling of 18 months duration. She had no particular medical history. Upon physical examination, there was an impulsive, expansive and reducible swelling of the infero-lateral right quadrant of the abdomen, characteristic of a hernia (Figure 1). The diagnosis of a right Spigelian hernia was then maintained because of the topography of the swelling. A surgical exploration by oblique herniotomy, under local-regional anesthesia following the long axis of the swelling revealed an interparietal hernia. The peritoneal sack was unilocular and lying between the external oblique aponeurosis and the internal oblique muscle. Musculo-aponeurotic structures were weak. The internal opening was located at the inguinal level (Figure 2). After dissection and resection of the sack, a herniotomy, as described by Bassini, was done, followed by the closure of the fascia of the external oblique muscle.

The postoperative course was uneventful. The patient showed no recurrence 6 months after surgery.

**Figure 1**

Figure 1: Right Inguinal interstitial hernia.



The circle indicates the inguinal swelling extending toward the right iliac fossa

**Figure 2**

Figure 2: Operative view. Opening of the hernia sac. The triangle indicates the aponeurosis of the external oblique muscle; the star shows an intestinal loop and the circle the hernia sac.

## DISCUSSION

Interparietal hernias represent 0.01 to 1.6% of inguinal hernias [2].

Anatomically, they can be classified into three types: (a) properitoneal hernia, in which the sack inserts itself between the peritoneum and transversalis fascia, (b) interstitial hernia, in which the sack is between the musculo-aponeurotic layers of the anterior abdominal wall, and (c) superficial hernia, in which the sack is located between the fascia of the external oblique muscle and the integument [3].

The type of interstitial hernia which was found in our case represents 60% of interparietal hernias. It is divided into four subtypes according to the situation of the sack: (a) between the fascia and the transverse muscle, (b) between the transverse muscle and the internal oblique muscle, (c) between the fibers of internal oblique muscle; or (d) between the internal oblique muscle and the external oblique muscle [2].

If the pathogenesis of the forms in the child is well understood, that of the adult remains poorly understood. Indeed, in the pediatric population, interstitial hernias are congenital in origin. They are usually associated with obstruction of the inguinal canal, secondary to cryptorchidism with an inguinal orifice narrowed or absent, which explains the supero-lateral migration of the hernia sack [4].

In adults, inguinal hernia is generally found interstitial after the fourth decade [5]. This has led some authors to discuss the possible role of anatomical disorders associated with systemic disease, or a genetic or acquired alteration of connective tissue [3,4]. The musculo-aponeurotic atrophy of the abdominal wall found in our patient could be part of this anatomical disorder.

On the other hand, the space between the aponeurosis of the external oblique and internal oblique muscle is an area of least resistance and would be a favorable site for the development of an interstitial hernia as is the case with our patient [3].

Clinical diagnosis would be easy normally in the presence of a large swelling in the inguinal-iliac region. However, accurate diagnosis of this anatomical type is rarely made preoperatively [1]. The other difficulty to the untrained practitioner is the likelihood of confusing this anatomical variety of inguinal hernia with a Spigelian hernia [4,5]. In fact, in our case the initial diagnosis was that of a Spigelian hernia.

According to Altman, 90% of cases are discovered as a result of intestinal obstruction due to strangulated hernia [6].

From a therapeutic point of view there is still no consensus regarding the technique of treatment. However, an oblique inguinal approach is recommended first by most authors because it provides good exposure and facilitates dissection of the sack [5,7]. In our case, the approach first allowed us to make a good diagnosis and effectively treat our patient.

## CONCLUSION

Interstitial inguinal hernia is a rare anatomical variety of inguinal hernias. It can be easily confused with a Spigelian hernia, especially when it is voluminous. You have to think about it when faced with any swelling in the inguinal-iliac region with the characteristics of a hernia. An oblique herniotomy provides a better view on the sack and allows for an effective cure.

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