

Nuck's Cyst, a Rare Groin Mass. A Case Report

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Abstract

Nuck's cyst is a rare entity, being a nonspecific condition.

It is very important to take it into account due to its difference diagnosis with inguinal hernia.

It is caused by the persistence of the processus vaginalis in women, which can produce a cyst that, depending on its relationship with the abdominal cavity, can coexist with an inguinal hernia.

It is also called a female hydrocele.

Keywords: Cyst of the Canal of Nuck; Inguinal Hernia; Female Hydrocele

Introduction

Nuck's cyst is a rare entity, being a nonspecific condition.

Case Summary

Our patient is a 45-year-old woman with a possible inguinocrural hernia of 1 month of evolution. In the examination reveals a left inguinal nodule that is not mobilized with the Valsalva maneuvers and is not reduces. An ultrasound and an MRI are performed that visualize a cystic image with two parts, a septum of about 24 x 15 mm superficial that continues in depth through the inguinal canal with another image being able to correspond to a Nuck Cyst (Figure 1).

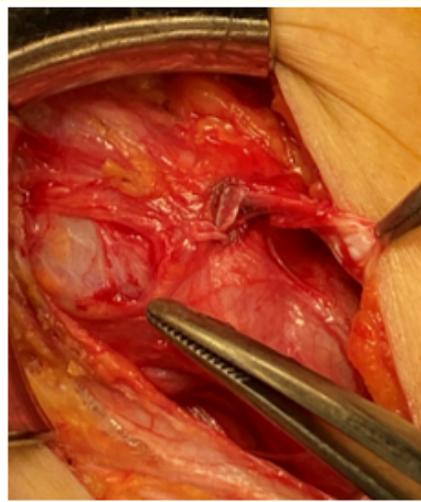


Figure 1

It was decided to perform a surgical intervention in which a bilobed Nuck cyst was observed below the plane of the greater oblique aponeurosis and above the transversalis fascia (Figure 2-4).

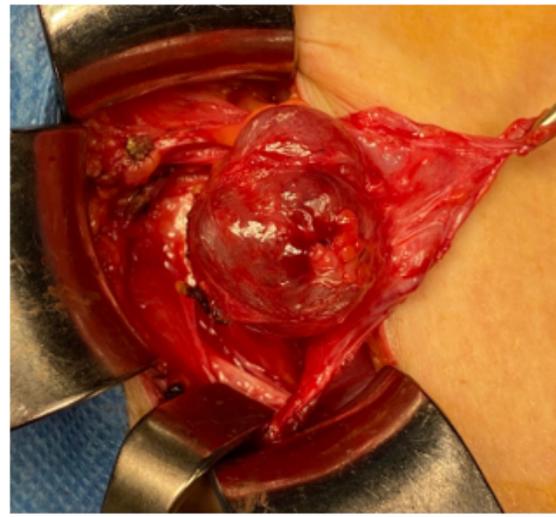


Figure 2

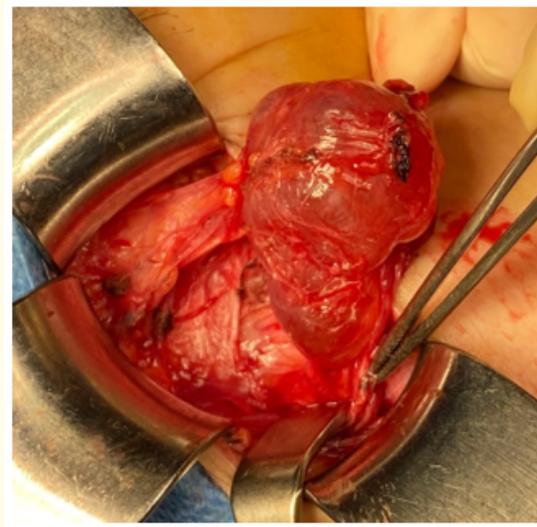


Figure 3



Figure 4

The removal of the left Nuck cyst respecting the round ligament and a hernioplasty of Liechtenstein.

The postoperative period is uneventful. The pathological anatomy is compatible with a mesothelial cyst.

Discussion and Conclusion

Nuck's cyst is a very rare entity. It most frequently affects women between 18 - 75 years of age.

It consists of an embryonic remnant due to a defect in the closure of the processus vaginalis. It is a structure that is located from the base of the round ligament, passing through the fallopian tubes to the labia majora, crossing the canal of Nuck (inguinal canal). It is an extension of the parietal peritoneum that crosses the inguinal canal. In case of leakage it can result in a peritoneal hernia or parietal cyst. They are made up of mesothelial epithelium.

They tend to appear more frequently on the right side, in 80% of cases and in 30% of cases they coexist with an inguinal hernia. They are usually 1 to 10 cm long. It usually disappears between one year and eight years of age.

The clinical symptoms are nonspecific, generally a tumor appears on the labia majora or in the inguinal region, being a soft and fluctuating tumor, which does not disappear or modify its size with changes in position or the Valsalva maneuver. It is usually painless but can sometimes present with pain (Table 1).

Symptoms	Inguinal hernia	Cyst of the canal of Nuck
Pain	Painless; may be painful if complicated	Mild or painless
Abdominal symptoms	Nausea, vomiting	None
Dorsal decubitus	Shows changes (disappears)	Does not change
Valsalva maneuvers	Changes	Does not change

Table 1: Differential diagnosis between cyst of the canal of suck and inguinal hernia.

The main differential diagnosis is with inguinal hernia (Table 2).

Condition	Characteristics
Cyst of the canal of Nuck	<ul style="list-style-type: none">• Anechoic, varying size (10 - 110 nun)• Non-reducible• No change with Valsalva maneuvers• No abdominal content• Negative Doppler signal

Table 2: Differential diagnosis by ultrasound imaging.

The definitive diagnosis is made with the histopathological study of the surgical piece. Treatment is based on surgical removal of the lesion [1-9].

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