

Irreducible inguinal hernia containing rudimentary uterine horn, ovary, and fallopian tube

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Summary

The authors present a typical case of inguinal hernia containing rudimentary uterine horn, ovary, and fallopian tube. During the operation of herniorrhaphy the right ovary and fallopian tube with rudimentary uterine horn were found in the hernia sac. The woman underwent laparoscopic hysterectomy three months before herniorrhaphy and was diagnosed with unicornuate uterus. The authors reviewed the case and suggested that detailed examination such as gynecological examination and magnetic resonance imaging be performed routinely in those females with inguinal hernias.

Key words: Inguinal hernia; Uterus; Ovary; Fallopian tube.

Introduction

Inguinal hernia containing rudimentary uterine horn, ovary, and fallopian tube is rare. Most of the cases are female infants [1-5] and reported by gynaecologists. Usually general surgeons are not familiar with this condition. The authors present a typical case of an adult whose diagnosis was confirmed intraoperatively.

Case Report

A 40-year-old woman was admitted to the present hospital with an irreducible right inguinal mass for more than ten years. She denied pain in inguinal region. Her menstruation period was normal. Three months prior she underwent a laparoscopic hysterectomy due to uterus leiomyoma and the recovery was good. During this operation, no right uterine adnexa could be found and unicornuate uterus was diagnosed postoperatively.

On physical examination a hard irreducible mass without tenderness was palpated in the right groin. Ultrasonography revealed a long hypoechoic mass leading to the abdomen. The mass was movable and there was no visible peristalsis. A diagnosis of irreducible inguinal hernia was considered and exploration of the inguinal region was performed. During the operation, the right ovary and fallopian tube with rudimentary uterine horn were found in the inguinal canal (Figure 1). The hernia contents were reduced to abdomen under the consultation of the gynaecologists. High ligation of the hernia sac and tension-free herniorrhaphy were performed with a preperitoneal prosthesis. The patient recovered uneventfully after operation.

Discussion

The first case of inguinal hernia containing uterus and uterine adnexa was reported by Deutschman in 1923 [6]. Riggall *et al.* named such condition “hernia uterus in-

guinale” [7]. Although unicornuate uterus in abdomen is not rare, the presence of a rudimentary uterine horn and adnexa in inguinal sac is uncommon for most surgeons. The incidence of an ovary in the hernia sac is reported to occur in about 4% of asymptomatic girls [8]. Failure of the fusion of bilateral Müllerian ducts resulted in the formation of unicornuate uterus. Such condition was reported frequently associated with vaginal agenesis and renal abnormalities [9].

Herein, the authors report an adult case of an irreducible indirect inguinal hernia containing rudimentary uterine horn, right ovary, and fallopian tube. She has a daughter and her menstruation was regular. No vaginal and renal agenesis were found on examination. During the operation of herniorrhaphy the unicornuate uterus and right adnexa were approved by a gynecologist. It reminded us to review the history of the hysterectomy and found the unicornuate uterus was diagnosed at that time. It was difficult to make the definite diagnosis preoperatively just according to the physical and ultrasonographic examinations. Most reported cases were diagnosed during the herniorrhaphy. Although rare, it was important for general surgeons to be aware of genital tract abnormalities that may present in the inguinal canal. Some of those cases were accompanied by an ipsilateral renal anomaly. For this woman the renal abnormality and gynecological disease were excluded through detailed examinations.

The present authors selected the open procedure for this patient considering the inguinal mass was irreducible. Generally resection of the rudimentary uterine horn was suggested considering the risk of ectopic pregnancy [10]. For this patient, the authors reduced the hernia contents to peritoneal cavity because it was non-functioning and non-communicating.

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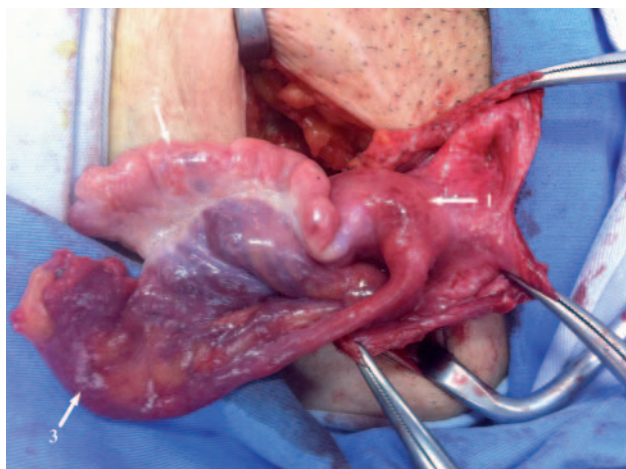


Figure 1. — Hernial sac presented with visible rudimentary uterine horn (1), ovary (2), and fallopian tube (3).

In summary, an accurate preoperative diagnosis of inguinal hernia contents is very important. The authors suggest that careful examination such as gynecological examination and magnetic resonance imaging be performed routinely in those females with an indirect inguinal hernia containing an asymptomatic palpable mass.

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