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Case report / Olgu sunumu

AN UNUSUAL CASE OF OVARY AND FALLOPIAN TUBE IN INGUINAL HERNIA

Kasık fıtığı içerisine girmiş bir Over ve Fallop tüpleri olgusu

Dwaipayan Samaddar, Parthasarathi Ghosh, Choden Norbu, Narayan Pandit, Jishnu Sankar Ray Basunia, Mahesh Yogesh Borikar

North Bengal Medical College / India

Corresponding address: Dr. Dwaipayan Samaddar, North Bengal Medical College / India
samaddardwaipayan@hotmail.com

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ABSTRACT

Inguinal hernia is extremely rare among girls. The hernia sac may sometimes involve intestinal structures, but ovaries in the sac are uncommon. Early diagnosis and surgery is essential to obviate the possibility of ovarian torsion. We encountered a 13 year old girl with a nonreducible groin lump that had no expansile cough impulse. An index of suspicion followed by imaging and diagnostic laparoscopy clinched the diagnosis of hernia ovary inguinale that was confirmed on exploration followed by replacement of the ovary into the pelvis. Though there might not be the usual criteria of reducibility and expansile cough impulse of hernia, we should be wary of this rare presentation especially in a young girl as it is exposed to the risk of torsion that we can prevent by early surgery.

Key words: Inguinal hernia, reduction, ovary, and fallopian tube.

ÖZET

Kadınlarda kasık fıtığı oldukça az görülen bir durumdur. Fıtık kesesi içerisinde barsakların olması olağan bir durum olmakla beraber nadiren de overler olabilir. Over torsiyonunun önlenmesi için erken tanı konulması önemlidir. Burada 13 yaşındaki bir kız çocuğunda karşılaştığımız, öksürükle büyümeyen ve redükte edilemeyen kasıkta şişlik vakası anlatılmıştır. Hastaya yapılan laparoskopi ile tanı doğrulanarak over karın içerisine redükte edildi. Kasıkta şişliğin öksürükle büyümemesi ve redükte olmaması fıtık olmadığı anlamına gelmemektedir. Bu tür vakalarda kasık fıtığının akla getirilmesi olası komplikasyonların önlenmesine katkıda bulunacaktır.

Anahtar kelimeler: Kasık fıtığı, redüksiyon, over ve fallop tüp.

INTRODUCTION

The most common etiology of inguinal swellings in children is inguinal hernia, with an incidence ranging from 0.8% to 4% (1). In infants, inguinal hernias are found about six times more commonly in male than in female (2). These are right sided in nearly 60% cases, left sided in 30% and bilateral in 10% cases (1). Inguinal hernia in the adolescent is generally not due to any defect in the posterior wall of the inguinal canal but it is generally due to a persistent processus vaginalis (3). Hernia of an ovary is rare and 95% of ovarian hernias are inguinal (4). Here we present a rare case of uncomplicated hernia ovary inguinale presenting with a mobile irreducible groin swelling without an expansile cough impulse in adolescence.

Case

A 13 year old girl presented with a swelling in the right groin since birth. Initially the swelling was pea sized and progressively increasing without any recent history of rapid growth. The size neither changed with position

nor with any act that increased the intraabdominal pressure. The swelling was painless all through its course. The girl had no other complaint and there was no significant past history. Her mother had no significant history of any drug intake or illness during pregnancy. She is a normally delivered first child and was mature at birth. The girl had not attended menarche.

On examination there was a 2 cm x 1.5 cm oval non-tender well-defined smooth firm swelling in the right groin (above inguinal ligament). There was no visible expansile cough impulse or pulsation. It was neither reducible nor compressible.

Sonography revealed a soft tissue structure resembling ovarian echotexture in the region of the right inguinal canal with the absence of the right ovary in the pelvis. However on conducting a diagnostic laparoscopy it was evident that the right ovary along with the right fallopian tube was entering the deep inguinal ring and there was no accessory or supernumerary ovary nor any other congenital anomaly.

Exploration confirmed that the right ovary and the right fallopian tube were the contents of the hernia sac (Figure 1). Contents were replaced into the abdominal cavity and a herniotomy performed. Post-operative recovery was uneventful. At further follow up the girl was asymptomatic.

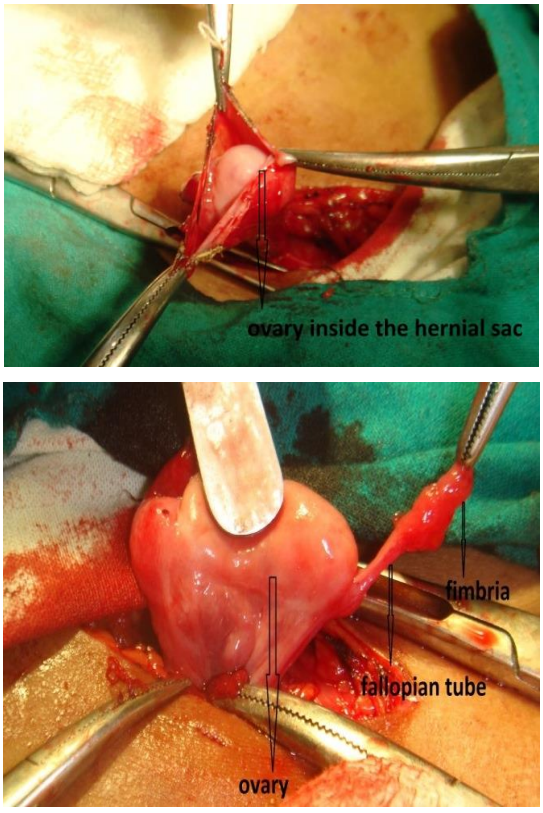

Figure 1: Hernia sac (above) and ovary and fallopian tube (below).

DISCUSSION

During embryogenesis, the gubernaculum and broad ligament suspend the ovary and prevent its descent through the canal of Nuck (processus vaginalis peritonei) to the base of the labium major. The canal of Nuck is obliterated by the 8th week of fetal life and the ovary is then suspended between the cornu of the uterus and the internal inguinal ring. The adult position of the ovary is reached about the tenth year of life. If the canal of Nuck remains open, the ovary and the fallopian tube and sometimes even the uterus may be forced through the canal to a congenital hernia sac. Normally the inguinal canal in a female contains the round ligament of the uterus which emulates the gubernaculum in the male (5).

Almost 30% of all reported cases are related to adolescents or women of reproductive age 12. Occurrence of ovary and fallopian tubes in inguinal hernia has been noted in premature infants and this is related to defects in genital tract, ovarian agenesis, Mullerian dysgenesis and ambiguous genitalia (3,6-8). The lateral fusion defects associated with Mullerian ductal development can also lead to the rare congenital anomaly , hernia uterus inguinale, a condition in which endometrium and myometrium are found in an ectopic location in the inguinal canal (9) . In our case no such secondary sexual development defect was noted.

Out of the total incidence of female inguinal hernias, approximately 4% to 37% cases presented with non reducible ovaries at the time of surgery, out of which 2% to 33% the ovary was twisted and infarcted (10,11). Ovary is at significant risk of torsion along with the fallopian tube on its pedicle whilst suspended from the neck of the hernia sac (10-12).

Though some cases have been managed conservatively, early recognition and reduction of an ovary is thought to be important to decrease the risk of infarction (10,13). The presence of an ovary in the inguinal canal requires laparoscopic or conventional surgical exploration (14,15). The aim of operative management of this rare anomaly is to preserve and reposition the ovary in the abdominal cavity (15). Presented case also was operated upon expeditiously with an uneventful postoperative recovery.

In most cases, the contents of the hernia sac can be detected intraoperatively. Although considered to be a very rare entity, the possibility of ovarian hernia should be kept in mind in any young female patient presenting with an irreducible swelling in the inguinal or femoral region even without any cough impulse in order to avoid serious complications like ovarian torsion. Whenever suspected, it must be treated as a surgical emergency. This case has

been presented for its rarity and its singular presentation and to highlight the importance of early surgery.

REFERENCES

1. Ziegler MM. Diagnosis of inguinal hernia and hydrocele. Pediatr Rev 1994;15(3): 286-8.

2. Kapur P, Caty MG, Glick PL. Pediatric hernias and hydroceles. Pediatr Clin North Am 1998;45(5):773-89.

3. Bradshaw KD, Carr BR. Ovarian and tubal inguinal hernia. Obstet Gynecol 1986;68(3 suppl):50S-52S.

4. Bapna N, Swarankar M, Khandelwal S. A rare case of ectopic ovary. J Obstet Gynecol India 2007;57(2):173-4.

5. Ozbey H, Ratschek M, Schimpl G, Hollwarth ME. Ovary in hernia sac: prolapsed or a descended gonad? J PediatrSurg 1999;34(6): 977-80.

6. Amarin ZO, Hart DM. Inguinal ovary and fallopian tube-an unusual hernia. Int J Gynecol Obstet 1988;27(1):141-3.

7. Gnidec AA, Marshall DG. Incarcerated direct inguinal hernia containing uterus, both ovaries, and fallopian tubes. J Pediatr Surg 1986;1(1):86.

8. Oudesluys-Murphy AM, Teng HT, Boxma H. Spontaneous regression of clinical inguinal hernias in preterm female infants. J Pediatr Surg 2000;5(2):220.

9. Elliott DC, Beam TE, Denapoli TS. Hernia uterus inguinale associated with unicornuate uterus. Arch Surg 1989;124(6):872.

10. Boley SJ, Cahn D, Lauer T, Weinberg G, Kleinhaus S. The irreducible ovary : a true emergency. J PediatrSurg 1991;26(9):1035-8.

11. Marinkovic S, Kantardzic M, Bukarica S, Grebeldinger S, Pajic M. When to operate nonreducible ovary? Med Pregl 1998;51(11-12): 537-40.

12. Merriman TE, Auldist AW. Ovarian torsion in inguinal hernias. Pediatr Surg Int 2000; 16(5-6):383-5.

13. Munden M, McEniff N, Mulvihill D. Sonographic investigation of female infants with inguinal masses. Clin Radiol 1995;50(5):696.

14. Vaughn TC, Jones HL. Laparoscopic repair of bilateral inguinal hernias in a patient with mullerian agenesis. Fertil Steril 2000;73(10): 1238.

15. Kriplani A, Banerjee N, Aminni AC, Kucheria K, Takkar D. Hernia uterus inguinale in a 46 XX female. A case report. J Reprod Med 2000;45(1):48.