CASE REPORT

Ectopic Gonads

Vaishnav Vanita · Gopal Sriram · Yadav Rajshekhar ·
Singh Richa · Bhagat Komal

Received: 21 November 2012 / Accepted: 30 June 2013 / Published online: 3 August 2013
© Federation of Obstetric & Gynecological Societies of India 2013

An inguinal hernia containing an ovary and uterus is rare in woman of reproductive age and are commonly associated with defects in genital tract development. This is a case of 19-year-old married female with primary amenorrhoea with left sided inguinal hernia of uterus and adnexa.

Case Report

19-year-old married female presented to our hospital OPD with primary amenorrhoea and a swelling in the left inguinal region since past 5–6 years. The swelling was initially small and non-tender but gradually increased in size and became tender. There was neither any contributory family history nor any significant past medical history.

On examination, she was found to be averagely built and nourished and having well-developed secondary sexual characters, with the following features: Vitals stable. Height 156 cm. No other systemic abnormality.

Bilateral breasts, axillary, and pubic hair well-developed. (Tanners stage IV). Palpable tender mass of approximately 3×2 cm in left inguinal region, 5–6 cm away from pubic tubercle, with no signs of inflammation on the overlying skin. Labia majora and minora, clitoris, and external urethral meatus normal with a blind vaginal pouch of approximately 4 cm with good rugosity. Ultrasonography s/o ectopic gonad (Lt ovary in inguinal canal with multiple follicles in it with a complex cyst 3.9×3.2 cm) hypoplastic pelvic uterus, ectopic kidneys, and bladder diverticulum.

Laparoscopy was performed. Left ovarian fossa was found empty. Rt ovary grossly normal and short fallopian tube seen arising from ant/lat abdominal wall. Small inguinal incision was taken over the swelling and sharp dissection done in layers. Below the muscular aponeurosis, peritoneal pouch of hernia was discovered. Peritoneal/hernia pouch was opened to reach ovary, short fallopian tube, and rudimentary horn of uterus approximately 1.5×2 cm size with a rudimentary round ligament. In view of these findings, the right adnexa was checked again laparoscopically, and on administering traction, it was found to be attached to a rudimentary horn of uterus within the? deep inguinal ring/inguinal canal.

It was then clear that we were dealing with a complete non-union of the mullerian ducts and bilateral inguinal hernia of the rudimentary uterus with attached gonads (normal looking). Wedge biopsy of left gonad was taken to confirm the histology.

Vaishnav V. (✉), JR (5th Post) · Gopal S.,
Professor, Head of Unit · Yadav R., Professor, Head of Unit ·
Singh R., Associate Professor · Bhagat K., JR (3rd post)
OBGYN, Dr D Y Patil Hospital and Research Centre, Sector 7,
Nerul, Navi Mumbai, Maharashtra, India
e-mail: drvanitadhar@gmail.com

Discussion

The fallopian tubes, uterus, and upper portion of the vagina are created by fusion of the müllerian ducts by the tenth week of gestation [1]. Congenital absence of the uterus and vagina is the result of lack of müllerian development (Mayer–Rokitansky–Kuster–Hauser syndrome). However, this is somewhat misleading because many patients do have development of the lower third of the vagina, and, therefore, do not have the complete absence of the vagina as the name implies. This condition is more accurately

described as aplasia or dysplasia of the müllerian ducts. This was not a case of müllerian agenesis but of hypoplasia and fusion defect which was discovered on laparoscopy. Thus, it was not surprising to discover some uterine tissue next to the ovary in the inguinal canal at the time of the hernia repair.

Normally, the descent of the ovary through the canal of Nuck to the base of labium majus is prevented by the fixation of the gubernaculum of the ovary—the anlage of the ovarian and round ligaments—to the cornu of the uterus [2]. The distal end of the gubernaculum is attached to the

base of the labium majus. The canal of Nuck normally becomes obliterated by the end of the eighth month of intrauterine life [3]. If, however, the canal of Nuck remains open, shortening of the distal end of the gubernaculum or the change in the relative growth of the parts, together with failure of the attachment of the proximal end of the gubernaculum in time to the deformed or underdeveloped uterus, causes the ovary to be pulled into the canal of Nuck lying within the open inguinal canal. The tube follows the ovary into the canal, since the proximal portion of the mullerian duct is closely associated with the ovary in its development.

This condition is generally asymptomatic, and patients usually do not seek professional assistance until the age of puberty when menstruation has yet to begin [4]. Occasionally, patients will present for the evaluation of recurrent pelvic pain usually associated with functioning endometrium within a rudimentary uterine horn. However, this patient did not have a uterine horn with functioning endometrium. In this case, the clinical presentation was due to pubertal changes in the ovary lying in the left inguinal canal with formation of a follicular cyst and subsequent

pain/tenderness. Also, it is common for these patients to have urologic abnormalities. It is appropriate for these patients to undergo an intravenous pyelogram [5].

The case in this study secures a point of diagnostic laparoscopy in all cases of Mayer–Rokitansky–Kuster–Hauser syndrome.

References

1. Speroff L, Glass RH, Kase NG. Clinical gynecologic endocrinology and infertility. Baltimore: Williams & Wilkins; 2000. p. 419–20.
2. Bradshaw KD, Carr BR. Ovarian and tubal inguinal hernia. *Obstet Gynecol.* 1986;68:50S.
3. Elliott DC, Beam TE, Denapoli TS. Hernia uterus inguinale associated with unicornuate uterus. *Arch Surg.* 1989;124:872.
4. George EK, Oudesluys-Murphy AM, Madern GC, et al. Inguinal hernias containing the uterus, fallopian tube, and ovary in premature female infants. *J Pediatr.* 2000;136:696–8.
5. Elliott DC, Beam TE, Denapoli TS. Hernia uterus inguinale associated with unicornuate uterus. *Arch Surg.* 1989;124:872–3.