Case Report ISSN 2639-9342

Gynecology & Reproductive Health

Ectopic Ovary in Morison's Pouch in 16-Year- Old Adolescent with Gastroschisis Presenting with Chronic Abdominal Pain

Biserka K Frković[1], Ana B Tripalo[2], Željka Mihaljević[3] and Ivana Ora[4]

[1]*Clinic for Women's Diseases and Childbirth, Clinical Hospital Centre Zagreb, Croatia.*

[2]*Children's Hospital Zagreb, Croatia.*

[3]*Institute for Public Health of the Zagreb County, Croatia.*

[4]*Institute for Public Health of Split-Dalmatia County, Croatia.*

***Correspondence:**
Biserka Knezić Frković, Clinic for Women's Diseases and Childbirth, Clinical Hospital Centre Zagreb, Croatia, Mobile: 00385915068836.

Received: 06 Dec 2024; **Accepted:** 16 Jan 2025; **Published:** 25 Jan 2025

Citation: Frković BK, Tripalo AB, Mihaljević Z, et al. Ectopic Ovary in Morison's Pouch in 16-Year- Old Adolescent with Gastroschisis Presenting with Chronic Abdominal Pain. Gynecol Reprod Health. 2025; 9(1): 1-3.

ABSTRACT

Background: *Ovarian ectopy is usually associated with Müllerian abnormalities.*

Case: *We report a 16- year-old girl, presented with abdominal pain for 2 years. She had a history of gastroschisis surgery, appendectomy and repeated admissions. She presented stabbing pain, cyclic, lasting up to 2 to 3 weeks, she occasionally woke up at night due to pain. MRI showed a right-sided, ectopic ovary in Morison's pouch, between liver and kidney. Expert opinion was that ovariectomy was not indicated and oral hormonal contraception was suggested.*

Conclusion: *This case report prompts a gynecologist to consider diagnosis of ectopic ovary in the adolescents with repeated episodes of abdominal pain, absent ovary on the routine pelvic ultrasound scan, history of gastroschisis or history of abdominal surgery.*

Keywords

Ectopic ovary, Morison's pouch, Abdominal pain, Gastroschisis.

Introduction

Lachman suggested that ectopic ovary may be classified as post-surgical implants, post-inflammatory implants or true (ectopic) ovarian tissue [1]. Lachman found that almost 50% of the reported cases were seen in patients with previous pelvic surgery [1]. In our case there is history of abdominal surgery.

We report a 16-year-old girl, presented with right-sided abdominal pain for two years. She had a history of gastroschisis surgery in childhood, appendectomy and repeated admissions with chronic pelvic pain. The purpose of this case report is to raise the awareness among specialists for their consideration in adolescents with chronic abdominal pain. Ectopic ovary could contribute to recurrent abdominal pain and should be considered as differential diagnosis.

Case Report

A 16-year-old female adolescent presented with right-sided abdominal pain for two years. She had a history of gastroschisis surgery in childhood requiring 2 surgeries in infancy and appendectomy in March 2021 with conversion to laparotomy due to adhesions. Appendix was presented in the left hemiabdomen and it was not inflamed. Postoperatively in April 2021 MR showed in the right hemiabdomen, subhepatic, an oblong cystic formation 3.6 x 4.1 cm, craniocaudally diameter of about 9 cm, thin-walled, extended from subhepatic and in front of the lower pole of the right kidney. Lateral to the described cyst and subhepatic there was an oval formation of size 3.2 x 1.3 cm with small cysts, differential diagnosis ectopic ovary, the uterus had normal morphology, the fundus rested on the external iliac blood vessels, the left ovary was located in the pelvis at the left back, with a normal morphology (Figure 1). In November 2021 gynecological ultrasound showed

a normal uterus, due to the shadow in the incision area it was not possible to see the adnexa. In November 2021 abdominal ultrasound showed that the described oval structure verified on MR was no longer displayed.

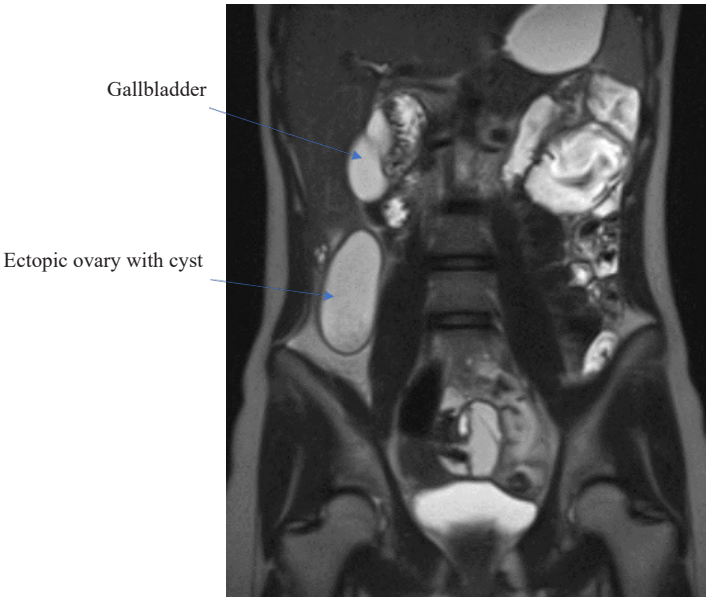

Figure 1: T2 HASTE coronal.

In the right hemiabdomen, subhepatic, an oblong cystic formation 3.6 x 4.1 cm, craniocaudally diameter of about 9 cm, thin-walled, extended from subhepatic and in front of the lower pole of the right kidney. Lateral to the described cyst, oval formation of size 3.2 x 1.3 cm with small cysts, differential diagnosis ectopic ovary. The left ovary located in the pelvis at the left back, with a normal morphology.

After appendectomy she was still complaining of repeated abdominal pain. Due to persisting pain she was admitted to another hospital in November 2022 for gastroenterology examination, gynecology examination, nephrology examination, laboratory processing, ultrasound of abdomen and urinary tract. The pain was stabbing, unrelated to meals or movement, cyclic, lasting for 2 to 3 days, up to 2 to 3 weeks, she occasionally woke up at night due to pain, the pain subsided by 600 mg ibuprofen. Appetite was good, she did not lose weight or vomit. Ultrasound of the abdomen showed in the right hemiabdomen, next to the lower edge of the right kidney, a structure with a size of about 28 mm filled with cysts, which corresponds to the echo morphology of the right ovary. Gynecological history revealed menarche at the age of 13, menstrual cycle 35/7, moderately abundant, sometimes painful. Gynecological ultrasound with a rectal vaginal probe reported uterus in AV, measuring 55 x 24 x 41mm, volume 28.27 cm^3 homogeneous, secretory endometrium 6 mm, behind the uterus more parasagittal left a structure corresponding to left ovary, size 22x 17 x 25mm, volume 4.87 cm^3 with follicles up to 10 mm, AFC 8, the right ovary was not seen. Magnetic resonance imaging of the pelvis showed and confirmed ectopic right ovary below the right kidney, elongated and 55 mm long, with neat follicles (Figure 2).

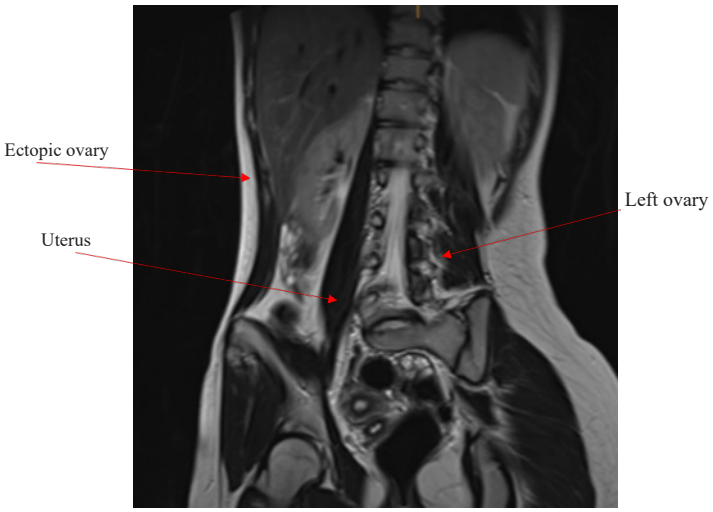

Figure 2: T2 HASTE oblique – reconstruction.
Ectopic right ovary below the right kidney, elongated and 55 mm long, with neat follicles.

The patient was presented to the board of the Clinic for Human Reproduction, who was opinion that ovariectomy was not indicated. Hormonal and complete blood picture was flawless. Oral hormonal contraception was suggested.

Discussion

The ovaries start to develop behind the peritoneal space near the kidneys, medial to the urogenital fold. Each ovary should descend to the ovarian fossae in the pelvis via the gubernaculum, which is a mesenteric fold, by chemotactic mechanisms between 6 and 9 gestation weeks depending on normal development of the Müllerian system [2]. By week 20 gestation, the ovaries ought to be in the iliac fossae and located at the pelvic inlet at term. The ovaries should finally be at their normal place by the postpartum period [2].

Ectopic ovaries may be located at various points along the ovarian migration path. In our case, it was seen in Morison's pouch. Position of ectopic ovary have been reported behind the ascending colon [3], in inguinal hernia [4], above the pelvic brim [5], subhepatic region [6]. Treatment of ovarian ectopy has been suggested to be conservative and continuous treatment with oral contraceptives has been advised for patients with pain [2] however there has been cases reporting that laparoscopic management of the ectopic ovary led to a favorable, pain-free outcome for patients who had chronic abdominal pain or history of gastroschisis [3,7]. Gastroschisis patients are known to have abdominal pain later in life.

Conclusion

Our case reports unusual presentation of ectopic ovary in Morison's pouch and co-occurrence of ovarian ectopia and gastroschisis. Ectopic ovary should be considered in adolescents with repeated admissions due to abdominal or pelvic pain with an absent ovary on the routine pelvic ultrasound scan or history of gastroschisis and abdominal surgery. This could be missed or misinterpreted by the

pediatricians, pediatric surgeons, radiologists and gynecologists because of the abnormal location and lack of awareness as illustrated by this case.

References

1. Lachman MF, Berman MM. The ectopic ovary. A case report and review of the literature. Arch Pathol Lab Med. 1991; 115: 233-235.
2. Desteli GA, Eraslan T, Çevik H, et al. Undescended ovary presented with paraovarian cyst. J Turk Soc Obstet Gynecol. 2013; 10: 272-274.
3. Ireo E, Haruna M, Gandhi P. Laparoscopic Management of Maldescended Ovary Presenting with Recurrent Acute Abdomen. Gynecol Minim Invasive Ther. 2018; 7: 74-77.
4. Webb JB, Fallon SC, Lopez ME, et al. The management of an ectopic ovary in the inguinal canal: literature review and discussion. Pediatr Surg Int. 2014; 30: 1075-1078.
5. Garg D, Grazi R, Kankanala N, et al. Bilateral ovarian maldescent: Unusual cause of infertility - A case report and literature review. J Obstet Gynaecol Res. 2016; 42: 1038-1041.
6. Acet M, Altuntaş L, Ovalı S, et al. A case report: Unusual overlocation and successful pregnancy in müller canal anomaly patient. Gynecol Obstet Neonatol Med J. 2016; 1: 25-26.
7. Edwards R, McCagg J, Chirico P, et al. The Management of an Ectopic Ovary in an Adolescent Patient with Gastroschisis. J Pediatr Adolesc Gynecol. 2018; 31: 540-542.