

The 18-year-old-girl with unicornuate uterus and endometriosis

Yana Osnytska, Rafal Stojko , Agnieszka Droszol-Cop 

Chair and Department of Gynecology, Obstetrics and Gynecological Oncology, Medical University of Silesia in Katowice, Poland

INTRODUCTION

Unicornuate uterus is rare anomaly with occurs in 0.1–2% women and can have different anatomical variations depending when the Müller's ducts were differentiated improperly [3]. It can be single or with the presence of a rudimentary horn on the opposite side. Most rudimentary horns do not communicate with uterine cavity. Unicornuate uterus with non-communicative rudimentary horn, that has functional endometrium inside can cause symptoms of severe dysmenorrhea and cryptomenorrhea in rudimentary horn.

Ultrasound helps in diagnosing of rudimentary horns and detecting the cavity in it, but sometimes it can be difficult, especially in asymptomatic patients. Combination of 3D-US and MRI imaging play important roles in evaluating diagnosis of unicornuate uterus [2].

Laparoscopic treatment of rudimentary noncommunicating horn with cavity inside needs to be performed to prevent the endometriosis and reduce pain.

CLINICAL CASE

A 18-year-old girl was sent to the Department of Pediatric and Adolescent Gynecology in Katowice with the diagnosis of suspected endometriosis. Since her menarche she presented acyclic pelvic pain and severe dysmenorrhea. She was prescribed nonsteroidal anti-inflammatory drugs and oral contraceptives with no relief. Physical examination showed normal secondary sexual characteristics. On the gynecological inspection of the external genitalia, pubic hair was normally developed and an intact hymen was present. The abdomen had mild tenderness in the left part of lower abdomen with no masses palpable. Speculum, bimanual examination and transvaginal ultrasound wasn't performed because the girl was a virgin. A transabdominal ultrasound examination showed an anteverted uterus 24 × 28 mm, endometrium 10 mm (Fig. 1 and 2). Both ovaries were normal in size and morphology. She didn't have any uterine or pelvic surgery. Her mother had an endometriosis.

The decision was taken to perform laparoscopy in case of suspected endometriosis. Intra-operative findings were: a unicornuate uterus deviated on the right side of the pelvis, with rudimentary left horn with a noncommunicating cavity. In ASRM classification it's a type IVb anomaly [1]. The fallopian tube was twisted around the left ovary. Mild endometriosis was obvious, involving the peritoneum of the pouch of Douglas, the left sacrouterine ligaments and sigmoid (Fig. 3 and 4).

She remained stable throughout the post-operative period and was discharged on the 2nd day post-operatively. After the operation a dienogest therapy (2 mg of dienogest a day) was prescribed for approximately eight months. Following therapy of oral contraceptives was recommended to the patient.

Corresponding author:

Osnytska Yana

Chair and Department of Gynecology, Obstetrics and Gynecological Oncology, Medical University of Silesia, 87 Markiefki St., 40–211 Katowice, Poland

phone: +48 783 857 593

e-mail: yana.osnytska@gmail.com

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Figure 1. Ultrasound examination of the uterus (the own material)



Figure 2. Ultrasound examination of the left adnexa (non-communicative horn) (the own material)



Figure 3. Intra-operative findings: a unicornuate uterus projecting to the right side of the pelvis, a rudimentary left horn with no cavity that did not communicate with the unicornuate uterus, fallopian tube, twisted around the left ovary and fluid in the punch of Douglas (the own material)

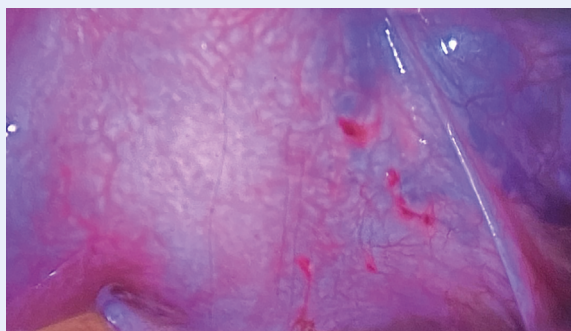


Figure 4. Red implants of endometriosis (the own material)

CONCLUSIONS

Early establishment of diagnosis is important to prevent peritoneal endometriosis and decreasing reproductive potential. Three-dimensional ultrasound (3D-US), magnetic resonance imaging and laparoscopy allows to classify accurately such uterine malformations [2].

Non-communicative rudimentary horn with endometrium needs to be resected because of risk of its rupture in pregnancy that can happen due to peritoneal migration of ovum from the opposite side. Rupture of rudimentary horn can lead to massive intraabdominal hemorrhage and hemorrhagic shock.

Article information and declarations

Conflict of interest

All authors declare no conflict of interest.

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