



Ultrasonographic signs of acute ovarian torsion

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ABSTRACT

Ovarian torsion is defined as partial or complete rotation of the ovarian vascular pedicle and causes obstruction to venous outflow and arterial inflow. Teenage patient was referred to the gynecology ward with pain located in the lower, right abdomen, after an initial misdiagnosis of a dermoid cyst. The patient was diagnosed with a torsion of the right ovarian peduncle. The patient was given diastolic drugs and was discharged in good general condition two days later after the symptoms had resolved. Final USG showed normally vasculated corpus luteum. Among the various treatment options, the wait-and-watch attitude turned out to be the best solution. It is particularly important in the case of young patients, who are planning pregnancy in the future.

Key words: ovarian torsion; USG; teenage patient

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Ovarian torsion is defined as partial or complete rotation of the ovarian vascular pedicle and causes obstruction to venous outflow and arterial inflow. Ovarian torsion is usually associated with a cyst or tumor, which is typically benign. It can occur in females of all ages, but prevalingly in their reproductive years. Strong abdominal pain is one of the main symptoms of acute ovarian torsion. However, its nonspecificity makes it difficult to differentiate ovarian torsion from other causes of acute abdominal pain [1]. Without proper treatment it may lead to ischaemia, necrosis, and consequently to losing function of the uterine appendages as well as fertility. Within teenage girls the most popular cases are ovarian torsions, occurring alongside cysts and ovarian tumors, but 46% of ovarian torsions come about without previously mentioned states [2]. Ovarian torsion is the fifth most common gynecologic surgical emergency, with prevalence rates of 2.7% to 3% [3]. Treatment options consist of cystectomy, oophorectomy, salpingo-oophorectomy, contraceptives, pain relieving medications and wait-and-watch attitude. Preferred method of diagnosis is color Doppler ultrasound examination followed by a blood test, however MRI and CT scans or laparoscopic examination can also be used [4].

A teenage patient was referred to the gynecology ward of the SPSK4 in Lublin with pain located in the lower, right abdomen, after an initial misdiagnosis of a dermoid cyst. After admission, diagnostic tests were conducted. Intervaginal ultrasonographic examination showed edema and the whirlpool sign of the right ovary (Fig. 1). The patient was diagnosed with a torsion of the right ovarian peduncle. The patient was given diastolic drugs and was discharged in good general condition two days later after the symptoms had resolved. The final USG showed normally vasculated corpus luteum. The patient was instructed to follow up in the clinic after a month and advised to prophylactically take a two-component hormone tablet for three months from the beginning of the next menstrual cycle. The following ultrasound examination showed a normal image of the reproductive organ. Additionally, the ovarian reserve was assessed by marking the AMH level. The result indicated a normal ovarian reserve.

Among the various treatment options, the wait-and-watch attitude turned out to be the best solution. It is particularly important in the case of young patients, who are planning pregnancy in the future. For the purpose of prevention, it is worth

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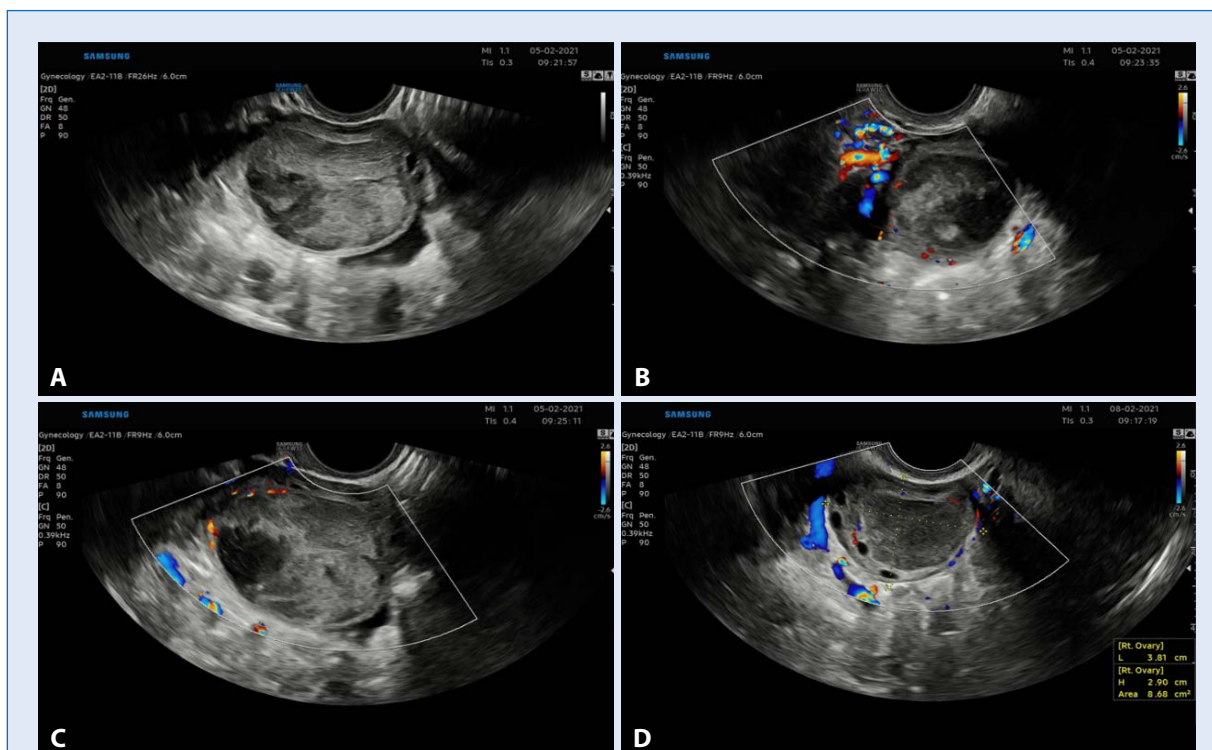


Figure 1. Intervaginal ultrasonographic examination showed edema (A, C) and the whirlpool sign of the right ovary (B, D)

using contraceptives. It is paramount to pay extra attention to getting a thorough medical examination, as it may help with early diagnosis and consequently restore proper blood flow in the ovary, which may prevent permanent damage.

Conflict of interest

All authors declare no conflict of interest.

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