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SONOLOGICAL DIAGNOSIS OF FUNCTIONAL OVARIAN CYSTS

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Annotation: The frequency of functional ovarian cysts in the structure of general gynecological pathology is up to 25%. This pathology has polyetiological nature. The clinical symptoms of functional ovarian formations are nonspecific and are not easy to diagnose. Ultrasound is very helpful in diagnostics of this pathological state. 45 patients aged from 18 to 49 years with benign tumor-like ovarian formations were examined. In 51.11 % of patients, it was possible to verify the nature of the tumor-like formation of the ovaries by sonological signs. Follicular cysts were detected in 30.43% of cases, as anechogenic thin-walled formation with distal acoustic amplification without solid component. Corpus luteum cysts were found in 21.74% of patients. In 43.15% of cases, ovarian cysts were combined with uterine fibroids, in 6.04% -with endometriosis, in 18% - with endometrial hyperplasia, in 7.52% - with hydrosalpinx.

Key words: ultrasound, diagnostics, follicular cysts, corpus luteum cysts, functional cysts

Actuality. The frequency of functional ovarian cysts in the structure of general gynecological pathology is up to 25% [1, p. 183; 2, p. 10]. The development of functional ovarian cysts is based on hormonal homeostasis, inflammation, and a consequence of the use of drugs [3, p.70; 4, p. 62; 5, p. 180]. Women of reproductive age are most susceptible to the development of tumor-like ovarian formations [6, p. 110].

The clinical symptoms of functional ovarian formations are nonspecific, more

often manifested by the presence of pain, menstrual irregularities, but most often ovarian cysts are diagnosed by chance during ultrasound [7, p. 75]. Due to the generally accepted point of view, this condition is borderline and often does not require medical correction. When developing the clinical route of the patient, as well as to confirm the functional nature of the identified formation, the method of ultrasound diagnostics with dynamic control is used.

Materials and methods. 45 patients aged from 18 to 49 years (mean age 34.83±0.82 years) with benign tumor-like ovarian formations were examined. In the age aspect, there were 20 patients (44.44%) of active reproductive age (from 18 to 35 years), 25 women (55.56%) of late reproductive age (from 36 to 49 years). The control group consisted of 50 somatically and gynecologically healthy patients.

The study was carried out on the basis of the Zvyagel Multidisciplinary Hospital of the Zvyagel City Council (Zvyagel, Ukraine). Ultrasound examination was carried out on the device LOGIQ F6 (General Electric Medical Systems) in the first phase of the menstrual cycle.

Results and discussion. In patients of the main group, an increase in the linear size of the uterus was revealed compared to the control group: length by 1.25 times ($p<0,05$), width – by 1.03 times ($p<0,05$), thickness – by 1.4 times ($p<0,05$). In 43.15% of cases, tumor-like ovarian formation was combined with uterine fibroids, in 6.04% with endometriosis, in 18% with endometrial hyperplasia. Inflammatory processes of the fallopian tubes such as hydrosalpinx were detected in 7.52% of cases. Significant changes ($p<0.05$) in the linear dimensions of a healthy ovary (length, width and thickness) and the average ovarian volume by 1.09 times were also diagnosed.

On the side of the cyst, there was a significant increase in the length of the ovary by 1.63 times ($p<0.05$), width – by 1.5 times ($p<0.05$), thickness – by 1.74 times ($p<0.05$). At the same time, the average volume of the ovary was increased by 4.93 times. In 17.8% of patients it was not possible to visualize the follicular apparatus.

In 23 patients (51.11 %), it was possible to verify the nature of the tumor-like

formation of the ovaries by sonological signs. Thus, follicular cysts were detected in 7 patients (30.43%), as anechogenic thin-walled formation with distal acoustic amplification without solid component. Corpus luteum cyst were found in 5 women (21.74%). The peculiarity of these cysts was the presence of a thickened fine-toothed wall, internal echoes and peripheral vascularization - the "fire ring". In more than 22 of patients (48.89%), the type of the cyst was not determined, and the diagnosis sounded like a cystic change in the ovaries.

Conclusions.

1. Ultrasound examination of the pelvic organs allows to verify the nature of the tumor-like formation of the ovaries. It gives the opportunity to optimize the further algorithm of examination and development of a therapeutic strategy.

2. Identification of concomitant pathology of the organs of the reproductive system allows timely correction of violations.

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