High torsion risk in ovarian cysts detected prenatal period

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Aim

Today, with more widespread and detailed prenatal follow-up and imaging, the rate of detection of fetal ovarian cysts has increased. Postnatal follow-up of these detected fetal cysts is important due to the risk of torsion. In this study, it was aimed to present our patients who were operated on in the postnatal period due to ovarian cysts detected in the prenatal period in our clinic.

Materials and methods

The records of patients who were diagnosed with ovarian cysts in the prenatal period and operated in the postnatal period in our clinic between 2020 and 2025 were retrospectively reviewed.

Figure 2. Necrotic ovarian cyst during laparoscopy

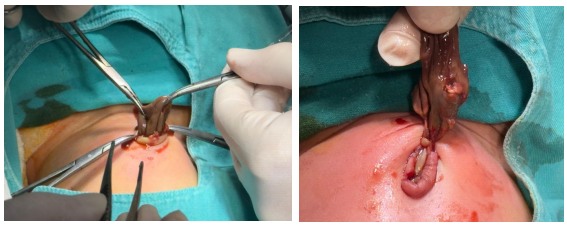

Figure 3. Ovarian cyst removed from the umblikus

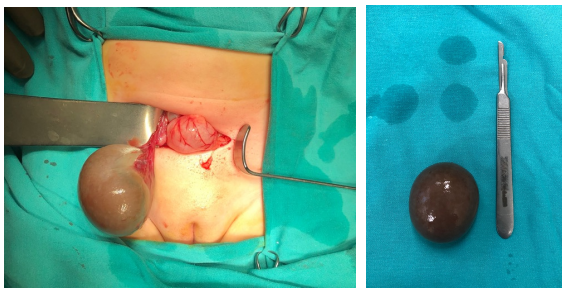

Figure 4. Necrotic another right ovarian cyst resected with open surgery

Conclusion

In ovarian cysts detected in the prenatal period and with complications in imaging methods, the risk of torsion is quite high, as in our patients. Even if torsion is not suspected in these patients, laparoscopic exploration should definitely be performed and should not be followed conservatively. Since torsion usually occurs in the prenatal period and necrosis develops in most of them, patients should be operated on as soon as conditions are suitable, even if it is not very urgent.

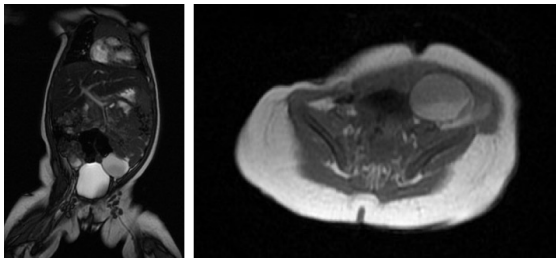

Figure 1. Complicated left ovarian cyst on CT

Results

A total of 11 female babies were operated in the postnatal period due to ovarian cysts (right/left=6/5) detected in the prenatal period. In the preoperative imaging studies of the patients, the mean cyst size was measured as 58.3 ± 25.5 (25-120) mm, while pure cystic lesion was detected in only one patient, and complicated (leveling, septation, calcification, lack of blood supply) cystic lesions were detected in the other 10 patients; torsion was suspected in three patients, and teratoma was suspected in three patients (Figure 1). The mean operation age of the patients was 24.8 ± 27.9 (1-85) days. Laparoscopic surgery was performed in 9 of the patients, and open surgery was performed in two; only two patients had no ovarian torsion, while 5 patients underwent detorsion after torsion was detected; in two patients, despite no torsion, the ovarian pedicle was observed to be very thin (probably due to early torsion in the prenatal period) and the ovary was necrotic; in the other two patients, the ovary was seen to be detached from its pedicle, also due to early torsion in the prenatal period, one was adherent to the colon and the other to the inguinal canal (Figures 2, 3, 4, 5). Torsion was detected in 9 out of 11 patients in total. Cyst excision was performed in two patients without torsion and in one patient in whom torsion was detected and detorsion was applied, while oophorectomy was performed in the other 8 patients. Pathological examination of the patients who underwent cyst excision was evaluated as follicular cysts, while necrosis was observed in all patients who underwent oophorectomy, and no teratoma was detected in any patient.

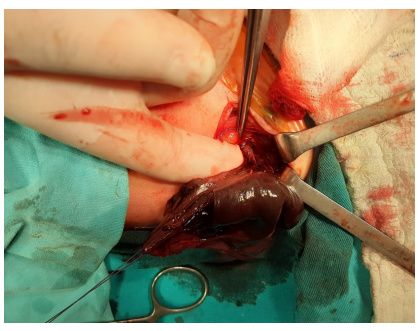

Figure 5. Torsioned and necrotic ovarian cyst