

*Aditya T., Anshu K.*

## **MANAGEMENT OF OVARIAN CYSTS AND CANCER IN PREGNANCY**

***Tutor: PhD, associate professor Savitskaya V.M.***

*Department of Obstetrics and Gynaecology*

*Belarusian State Medical University, Minsk*

**Background.** Ovarian cysts are frequently detected during pregnancy due to routine antenatal ultrasound screenings. While most are benign and resolve spontaneously, malignant ovarian tumors, though rare, pose significant clinical challenges. Diagnosing adnexal masses during pregnancy requires careful imaging techniques and clinical judgment, as physiological changes in pregnancy can make interpretation difficult. Surgical management is necessary for larger or symptomatic cysts and for suspected malignancies. Due to potential risks to fetal and maternal health, conservative management is preferred. A multidisciplinary team approach is crucial in managing complex cases to optimize both maternal and fetal outcomes.

**Aim:** evaluate the diagnostic strategies, management protocols, and maternal-fetal outcomes associated with ovarian cysts and malignancies in pregnancy.

**Materials and methods.** A comprehensive review of published literature was conducted, including retrospective cohort studies, clinical guidelines, and case reports related to ovarian cysts and cancer in pregnancy. Diagnostic imaging techniques, treatment methodologies, and patient outcomes were critically analysed. Studies exploring surgical interventions versus conservative management were compared, with a focus on risk assessment and best-practice recommendations for optimizing patient care.

**Results and their discussion.** Ultrasound remains the preferred initial imaging tool due to its accessibility and safety during pregnancy. Several factors, such as gestational changes and bowel displacement, can limit its accuracy. MIZI provides superior soft tissue evaluation and is considered safe after the first trimester, making it an important adjunct in difficult cases. Surgery is recommended for large, symptomatic, or complex cysts with suspicious features of malignancy. Laparoscopic procedures can be performed between 14-16 weeks gestation but require advanced laparoscopic skills to ensure maternal and fetal safety. Conservative management is preferred when malignancy is unlikely, reducing surgical risks while allowing spontaneous resolution of benign cysts. In ovarian cancer, treatment decisions are guided by gestational age, staging, and maternal health. Chemotherapy may be administered safely in selected cases after the first trimester, but long-term outcomes require continued study. Early diagnosis significantly improves prognosis, high-risk pregnancies may require preterm delivery depending on disease progression. Studies suggest that maternal survival rates for ovarian cancer in pregnancy are comparable to non-pregnant individuals when appropriately managed, emphasizing the importance of early intervention and a multidisciplinary approach to patient care.

**Conclusion.** The management of ovarian cysts and cancer during pregnancy necessitates a careful balance between maternal health and fetal safety. While conservative management is preferred for benign cysts, timely surgical intervention is critical for symptomatic and malignant cases. Advances in imaging techniques, laparoscopic surgery, and multidisciplinary collaboration have significantly improved outcomes for pregnant women with adnexal masses.