

*Sayed S.S., Ray P.*

## **COMPARATIVE ANALYSIS OF MORBIDITY TRENDS IN ADOLESCENT GYNECOLOGICAL PATIENT GROUPS**

*Tutor: PhD, senior lecturer Tihonovich E.V.*

*Department of Obstetrics and Gynecology with Advanced Training and Retraining Courses  
Belarusian State Medical University, Minsk*

**Introduction.** Adolescents represent a crucial demographic in gynecological healthcare, with specific issues such as menstrual disorders, benign tumors, and inflammatory diseases often underreported. Understanding the morbidity structure of adolescent gynecological issues is essential for developing targeted interventions and healthcare strategies.

**Objective:** this study analyzes and compares the morbidity structure of adolescents with gynecological conditions in the years 2023 and 2024, focusing on the incidence and prevalence of various diseases. It seeks to identify the most common and rare conditions impacting this age group.

**Materials and methods.** A retrospective analysis was conducted using hospital records from a gynecological unit for two consecutive years. Data collected included the incidence rates of various conditions such as abnormal uterine bleeding (AUB), benign ovarian tumors, inflammatory diseases, and abortion cases. The sample comprised all adolescent patients aged 11 to 19 years who attended the facility.

**Results and their discussion.** The average age of the participants was  $15.47 \pm 2.16$ . The data revealed that abnormal uterine bleeding (AUB) ranked as the most common condition in both years, with 378 cases (66.1%) in 2023, shifting slightly to 451 cases (62.7%) in 2024. The average duration of treatment was 6.2 days in 2024 and 6.0 in 2023. This persistent high incidence indicates the necessity for better management strategies and patient education. Severe anemia due to AUB was diagnosed in 6 girls, which required blood transfusion. The coagulation system was examined with the help of the Republican Scientific and Practical Center for Pediatric Hematology. The data revealed that out of 451 patients with AUB, 4 were diagnosed with coagulation disorders, including deficiency of coagulation factor VII in 3 patients and von Willebrand disease in 1 patient.

Following abnormal uterine bleeding, benign ovarian tumors emerged as common concerns among the patients, impacting 70 (12.2%) cases and 114 (15.9%) individuals in 2023 and 2024, respectively, raising concerns about the rising trend in benign conditions.

In contrast, inflammatory diseases saw a decrease in incidence from 56 cases (9.8%) in 2023 to 48 cases (6.7%) in 2024, which might suggest improved preventive measures or awareness among adolescents and healthcare providers.

The number of abortion cases also declined from 20 (3.5%) to 18 (2.5%), indicating enhanced reproductive health education possibly leading to fewer unintended pregnancies.

The surgeries performed on adolescent patients included 114 cases of benign ovarian tumors, 43 cystectomies, 5 adnexectomies, and various reconstructive surgeries for vaginal anomalies. Additionally, there were 13 medical abortions and multiple D&C procedures, reflecting a significant number of interventions for complications such as ectopic pregnancies and dysfunctional uterine bleeding, with an operational activity rate of 17.71% among adolescents.

Rare cases such as ectopic pregnancies and non-viable pregnancies remained extremely low, with minimal fluctuations, thus confirming their status as uncommon occurrences in the adolescent population.

**Conclusion.** The findings highlighted the persistent prominence of menstrual disorders, particularly abnormal uterine bleeding, among adolescents. The increase in benign ovarian tumors is worrisome and necessitates further investigation. Conversely, the decrease in inflammatory diseases and abortion cases could reflect improvements in adolescent health awareness and preventive measures. This study emphasized the need for specialized adolescent gynecological clinics to enhance care, education, and early intervention strategies tailored to the unique needs of this age group.