

20. MEDICAL AND SOCIAL PATTERNS OF PELVIC INFLAMMATORY DISEASE IN THE REPUBLIC OF MOLDOVA



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Introduction. Pelvic inflammatory disease (PID) represents a significant medical and social problem. It encompasses conditions such as endometritis, salpingitis, hydrosalpinx, pyosalpinx, and tubo-ovarian abscess. The etiology is often polymicrobial, caused by *Chlamydia trachomatis* and *Neisseria gonorrhoeae* in about 40% of cases. PID frequently presents with urinary and gastrointestinal clinical signs, raising a diagnostic dilemma that often requires confirmation through various imaging investigations, including US exam, computed tomography, magnetic resonance imaging, hysterosalpingography, and laparoscopy.

Aim of study. To analyze the medical and social determinants, and the diagnostic imaging characteristics of PID.

Methods and materials. A number of 644 PID clinical cases, admitted at the Septic Gynecology Unit, Tertiary Perinatal Center, were assessed. The social and medical characteristics, as well as the diagnostic tools were evaluated in establishing and confirming PID.

Results. Age of the patients ranged from 18 to 52 years, with an average age of 27.4 ± 0.3 years. The initiation of sexual activity under the age of 17 was noted in 68.9% of cases, often associated with multiple partners and unprotected sexual intercourse (58.4%). Approximately 23.6% of patients reported inadequate intimate hygiene. A failure to seek medical attention upon symptom onset was reported by 59.2% of women. Regrettably, 129 patients (20.0%) reported to have an intrauterine device for more than ten years. A history of medical intrauterine interventions and/or clinical procedures in the pelvic cavity were reported by 11.0% of participants. Late hospitalization occurred in 71.9% of cases. The imaging methods used for diagnosis in all cases showed a 95% sensitivity, 89% specificity and 93% diagnostic accuracy. Signs of salpingitis (such as thickened fallopian tubes $>5\text{cm}$ – the "cogwheel sign," incomplete septa, and peritubal inflammatory fluid) were determined. Hydrosalpinx was characterized by echogenic walls with fine visibility, incomplete septa and the persistence of intraluminal structures – the "pearls on a string" sign. Pyosalpinx was identified by echogenic fluid content with pronounced shadowing, thickened walls and hydroaeric levels. Tubal obstruction was presented as a hitch to the contrast material flow through the fallopian tubes. Oophoritis was indicated by enlarged ovaries with a polycystic appearance.

Conclusion. PID is characterized by distinctive medical and social patterns. The imaging exams allow us to appreciate the location and spreading of PID in the pelvic cavity, acting as an important tool in the decision-making process.

Keywords. Pelvic inflammatory disease, salpingitis, hydrosalpinx, pyosalpinx, US exam.