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**ENDOTHELIAL DYSFUNCTION DIAGNOSIS IN CHILDREN AND ADOLESCENTS WITH INFLAMMATORY DISEASES IN GYNECOLOGICAL PRACTICE**

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**Relevance**. Every year more and more efforts are made to improve children and adolescent gynecological care. The main objectives are prevention, early detection and timely treatment of reproductive system diseases, necessary to maintain and strengthen reproductive health of prospective mothers. Inflammatory conditions are considered to be the most common gynecological diseases in childhood and adolescence.

**The purpose of the study**. To determine endothelial dysfunction during development and course of inflammatory diseases of the reproductive system in children and adolescents.

**Materials and methods**. Enzyme immunoassay was the main method, used as the basis for the assessment of endothelin-1 level in children and adolescents with inflammatory gynecological diseases. The study involved 43 girls aged from 11 to 17, divided into main and control groups. The main group included 8 girls aged 11-14 (I group) and 15 girls aged 15-17 (group II), hospitalized for evaluation and treatment of inflammatory diseases of the reproductive system. The control group comprised 20 girls without gynecological diseases. All the patients underwent follow-up assessment of somatic and gynecological status.

**The results of the study**. The study implied determination of endothelin-1 level to assess the state of endothelium in pathogenic mechanisms onset in inflammatory diseases of the reproductive system in children and adolescents. The majority of patients were found to have a significant increase in the level of endothelin-1 (57.4 ± 20.8; 57.02 ± 8.8 in groups I and II, respectively, and 16.4 ± 3.6 ng/ml in the control group - (p1,2 <0.05)), indicative of endothelial dysfunction.

**Conclusion.** Clinical course of inflammatory diseases in children and adolescents is accompanied by a threefold increase in endothelin-1 level, indicating the development of endothelial dysfunction.