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**DYSMENORRHEA IN ADOLESCENTS**

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**Relevance**. Dysmenorrhea (DM) ranks first among disorders of the menstrual cycle and is a neuroendocrine syndrome, which cyclically repeats, sometimes completely incapacitating girls during menstruation. The incidence of this disorder among gynecological diseases at puberty varies from 5 to 92%.

Primary DM, observed in most patients, results not only in incapacitation, but also to pronounced psychosomatic changes, from mild neurological conditions to severe psychotic syndromes. Most of the reproductive health disorders of adult women originate in childhood and adolescence. Therefore, timely diagnosis of the causes of painful menstruation, their adequate comprehensive correction and treatment of concomitant psychoneuroendocrine disorders become especially urgent.

Currently, the leading place among the theories explaining DM development belongs to prostaglandin theory, which is based on an innate or acquired disruption of synthesis or exchange of eicosanoids. High incidence of the disease and its medico-social significance are an important argument in the support of a thorough study of this problem.

**Purpose.** To study the risk factors for the development of dysmenorrhea of ​​varying severity in adolescent girls.

**Materials and methods.** The study involved 102 adolescent girls aged 11-18, who were divided into 3 groups: Group 1 included 52 adolescent girls with DM syndrome of mild severity; Group 2 consisted of 37 patients with moderate-degree DM syndrome; Group 3 included 13 girls with severe form of DM syndrome.

The patients underwent comprehensive clinical, laboratory, instrumental, hormonal examination, as well as ultrasound (US) examination of pelvic organs, internal organs, thyroid and mammary glands. The state of somatic health of patients was determined, they were all consulted by a pediatrician and related specialists on indications for revealing extragenital pathology.

**Results and discussion**. Extragenital pathology (EP) was detected in 75% of adolescents with DM, and a relationship was established between its character and the severity of clinical manifestations of DM. Mild pain syndrome (67.2%) was shown to be more common in girls with gastrointestinal, musculoskeletal diseases and myopia. Moderate severity of DM (25.9%) was more common in patients with hepato-biliary, urinary and thyroid diseases. Severe form of DM (6.8%) was observed in patients with metabolic-endocrine and neurovegetative manifestations, with cardiovascular and neurologic pathologies, often in combination with myopia.

DM in patients with EP developed on unfavorable hereditary and premorbid background: one out of every four patients was born asphyxiated, 45% of the mothers had menstrual and reproductive disorders, as well as obstetric complications. In 71.6% of the mothers of the examined adolescents, painful menstruation was observed throughout life, in most of them before childbirth.

The mean age of menarche was 11 years 8 months ± 9 months, regular cycle was preserved in the majority of the examined patients, however, in almost third of the patients pain syndrome was accompanied by occasional minor menstruation delays (from 5-10 days to a month). In the vast majority of patients, the duration of menstruation was 5-7 days.

Infectious index was 3 or higher in 48%, while 38% of the patients were registered with a pediatrician as sickly patients. Presentation was different depending on the severity of DM. Patients with mild DM severity had mild painful menstruation without systemic symptoms. The patients were not incapacitated and did not require medication. Patients with DM of moderate severity complained of pronounced soreness of menstruation with irradiation to the lumbar region, the pain was accompanied by some dyspeptic disorders, headache, dizziness and chills. Patients reported a decrease in ability to work. In patients with severe DM, clinical manifestations were characterized by severe pain during menstruation, accompanied by a complex of metabolic-endocrine and neurovegetative symptoms, complete disability.

A significant proportion of girls with DM had autonomic dysfunction (AD). They were diagnosed with sympathicotonic, vagotonic, mixed types of AD, which character depended on the hormonal status and pathological changes in menstrual function. The most pronounced clinical manifestations of AD were observed in adolescents with a vagotonic form of dysmenorrhea with pain syndrome, accompanied by hormonal imbalance and hemodynamic disorders in the cerebral vessels of the majority of the examined patients, which was confirmed by Doppler examination.

**Conclusions.** The study showed that adolescent DM in most cases (75%) occurs secondary to extragenital pathology. It allowed to determine the relationship between the nature of extragenital pathology and the severity of clinical manifestations of DM.