

Lower abdominal pain as a problem in child gynecology

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Summary

Lower abdominal pain in a girl is a common problem in gynecology of the developmental age (10-20%). It corresponds to the criteria of the concept of “chronic pelvic pain” (CPP), which is defined in accordance with the American College of Obstetricians and Gynecologists (ACOG) as chronic, non-cyclical pain in the area of the lower abdomen, unrelated to the menstrual cycle, lasting at least three months, or cyclic pain lasting for six months. The overriding aim of treatment of CPP in girls and young women is to alleviate existing pain, prevent recurrence of chronic symptoms, ensure future reproductive functions, and restore proper functioning and improve quality of life.

Key words: Gynecology; Girls; Chronic pelvic pain.

Introduction

Lower abdominal pain in a girl is a common problem in gynecological developmental age. The importance of psychosomatic factors in the etiology of chronic pelvic pain (CPP) in girls is emphasized. The reasons for the CPP in girls are divided into gynecological and non-oncological diseases, which causes girls to undergo extensive pediatric, gastroenterological, and surgical diagnostics. Unfortunately, the results of these consultations often do not provide unambiguous results. It occurs that only after all consultations, the juvenile patients eventually consult the gynecology outpatient clinic. Due to the very large impact of the aforementioned psychosomatic factors, during the medical interview, one cannot omit questions regarding family problems, educational problems, and problems concerning relations in the peer group. It is important to exclude: mood disorders, depressive disorders, anxiety, eating disorders (anorexia nervosa, bulimia), experiences related to sexual abuse (as many as 60% of sexually molested girls can manifest in the CPP future), aggression, and violence in the family (currently or in the past) or other emotional problems [1-5].

Diagnostics

There is a special diagnostic diagram “HEADS FIRST” for optimal psychological assessment of a girl with CPP symptoms. This diagram contains all elements of the interview in the aspect of psychosomatic issues related to: fam-

ily life (home), education (education), use (abuse), drug use and alcohol (drugs), risk behaviors (safety), social activity (friends), self-image, self-esteem (image), recreation, sexuality, and threats. It is necessary to consider diseases occurring from the earliest years and diseases occurring in the family.

Among the gynecological causes of CPP are: endometriosis, post-inflammatory adhesions and/or postoperative pelvic adhesions, pelvic inflammatory disease (PID), sexually transmitted infections (endometritis, vaginitis, vulvitis), congenital developmental anomalies of Müller’s ducts, changes in adnexa (benign *e.g.* functional cysts and malignant cysts), changes in the fallopian tubes (*eg.* fallopian tube, hydrosalpinx), juvenile pregnancy, and ectopic pregnancy (in sexually active girls) [1, 5-8].

Diagnosis and symptoms

According to the literature, the most common diagnoses in the following order are: endometriosis, adhesions in the minor pelvis, interstitial cystitis, and irritable bowel syndrome, and in 25-50% of cases, more than one cause of pain can be distinguished in the same patient with the co-occurrence of psychosomatic factors [9-14].

As it is emphasized in the literature, endometriosis is the most common diagnosis here: it accounts for as much as 50-70% of cases. Data from the literature and own observations indicate that patients with endometriosis report CPP, which persists after using oral two-part contraceptives

and non-steroidal anti-inflammatory drugs for three months. According to data from the literature, the incidence of endometriosis in girls with CPP increases with age: from 12% aged 11-13 years, 28% aged 14-15, 40% aged 16-17 years, 45% aged 18-19 years, to around 54% at the age of 20-21 [1, 9-12].

The causes of CPP in girls include ovarian functional cysts. This is especially true for girls shortly after the onset of the first ovulatory cycles, often due to abnormal ovulation, which usually occurs in the range of six months to one year from the appearance of the first menstrual period. Symptoms of functional ovarian cysts in girls are usually cyclical pain in the abdomen and irregular, painful menstruation. Sometimes, however, cysts do not cause any discomfort in some cases. It should be emphasized that functional cysts of ovaries in girls before puberty are rare, and it should be remembered that they can occur in girls with premature puberty, also in isolated praecox thelarche (premature development of the mammary glands).

A very important fact is the occurrence of the symptoms of a cyst or ovarian cyst, cysts of a hemorrhagic ovary or a healthy ovary or fallopian tube. This is manifested by pain in the minor pelvis or in the abdominal cavity of a wave nature, accompanied by nausea, vomiting, leukocytosis, and peritoneal symptoms [1, 5, 8, 9, 14]. It is also worth noting that the healthy ovarian torsion most often affects patients aged 7-11, mainly on the right side, which may mimic the symptoms of appendicitis, however this torsion can occur at any age. The factors predisposing to the occurrence of a healthy ovary or fallopian tube in girls are: abdominal injuries, previous gynecological procedures, elongation of the mesenteric vessels, physiological increased length of the fallopian tube and greater ovarian motility, and tubal spasm. A specific symptom in the ultrasound image is the image of "string of pearls", numerous ovarian follicles (with a diameter of 8-12 mm) located circumferentially in the ovary, and the use of the color Doppler technique may show a lack or reverse ovarian flow. However, ovarian perfusion disorders do not always occur and an unequivocal ultrasound image is not always created, so the use of this test is not a golden diagnostic standard here. It has been observed that in girls who are pubertal, the ovary or ovary and fallopian tubes are more often sprained, but sometimes there is an insulated twist of the fallopian tube, usually on the right side, which results from the physiological greater length of the oviduct.

In about 15-20% of girls, the cause of chronic pain in the minor pelvis, as well as the entire abdominal cavity, is irritable bowel syndrome. In this case the pain often subsides after defecation with the accompanying change in stool consistency. Criteria for the diagnosis of the full-blown irritable bowel syndrome in children and adolescents were adopted: the presence of at least 12 weeks during the last year of abdominal pain or discomfort, which disappears after defecation, also associated with change in stool con-

sistency and frequency of bowel movements. Differential diagnosis is necessary here, in which other organic or metabolic causes of the ailment should be excluded [1, 3, 8, 11, 14].

CPP in girls is therefore an interdisciplinary problem, therefore it is necessary to cooperate with pediatricians, children's surgeons, gastroenterologists, psychiatrists, and clinical psychologists, and sometimes sexologists, endocrinologists, dieticians, and educators.

The importance of a medical interview from the patient, parents or child caregivers should be stressed. An individual approach to both diagnostics and therapy is important. In therapy, depending on the reason diagnosed, pharmacological methods are selected (painkillers, hormonal therapy: two-component contraceptives, progestogens, GnRH analogs, antibiotic therapy, antidepressants, drugs affecting intestinal motility and fecal mass formation, intravesical agents, local anesthetics), surgical treatment (laparoscopy/laparotomy, hysteroscopy), alternative methods of pain treatment (acupuncture), and psychotherapy [1-3, 9, 11, 14].

Conclusion

In summary, it should be emphasized that the overriding aim of treatment of existing CPP in girls and young women is to alleviate all existing pain complaints and prevent relapse of chronic complaints. In addition, it is important to take special care of future reproductive functions and to restore proper functioning, which at the same time improves the quality of life.

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