

## Seksuologiczne i gineologiczne problemy u dzieci i dojrzewających dziewcząt

## Sexuologic and gynecologic problems in childhood and adolescence girls

<sup>1</sup>Jacek Boroch, <sup>1</sup>Grażyna Jarząbek-Bielecka, <sup>2</sup>Małgorzata Mizgier, <sup>3</sup>Andrzej Kędzia

<sup>1</sup>Pracownia Ginekologii Wieku Rozwojowego i Seksuologii Kliniki Ginekologii Katedry Perinatologii i Ginekologii UMP, <sup>2</sup>Zamiejscowy Wydział Kultury Fizycznej AWF Poznań, <sup>3</sup>Katedra Auksologii Klinicznej i Pielęgniarstwa Pediatricznego UMP

<sup>1</sup>Department of Perinatology and Gynecology, Division of Developmental Gynecology and Sexology, Poznan University of Medical Sciences, Poland, <sup>2</sup>Department of Morphological and Health Sciences, Dietetic Division, Faculty of Physical Culture in Gorzów Wlkp., University School of Physical Education in Poznań, <sup>3</sup>Department of Clinical Auxology and Pediatric Nursing UMP

### Słowa kluczowe

seksuologia, dziewczęta, masturbacja

### Key words

sexuology, girls, gynecology, masturbation

### Streszczenie

Seksuologia jako nauka bada ludzką seksualność z uwzględnieniem rozwoju seksualnego, zachowań, funkcji i preferencji. Problemy gineologiczne są związane z rozwojem seksualnym, z rozwojem osi podwzgórzowo-przysadkowo-jajnikowej. Rozwój i funkcje narządów płciowych są ściśle związane z czynnością osi podwzgórzowo-przysadkowo-jajnikowej. Ginekologia wieku rozwojowego to interdyscyplinarna specjalność, silnie związana z endokrynologią. Problemy gineologiczne u dziewcząt dotyczą zarówno medycznych jak i psychologicznych aspektów i wymagają specjalistycznego podejścia. Jednym z takich zagadnień jest problem masturbacji.

### Abstract

Sexology, as a science, studies human sexuality taking into account sexual development, behaviour, functions and preferences. Many gynecological problems are connected with sexual development and development hypothalamic-pituitary-ovarian axis. Development and function of sexual organs is closely connected with the hypothalamic-pituitary-ovarian activity. Pediatric and adolescent gynecology is an interdisciplinary speciality strongly connected with endocrinology. The gynecological problems encountered in children and adolescents are often both medically and psychologically complex and thus require a highly skilled and coherent approach. One of these problems is masturbation.

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Sexual life of a human is realised on three platforms: biological, psychological and social.

SEXUAL DEVELOPMENT = SOMATIC DEVELOPMENT + PSYCHO-SEXUAL DEVELOPMENT

Paediatric and adolescent gynaecology, also called paediatric and young girls gynaecology, is a field that was separated out of general gynaecology because of the differences in physiology and pathology of the female genital system during its development. The reproductive tract in children and adolescents is somewhat different in structure, hormonal support, and function from that of adult female, yet many of the same gynecologic disorder occur in both groups [1–8].

In sexual development of girls following stages can be distinguished:

1. *Neonatal stage* – influence of maternal oestrogens.

2. *Infantile stage* – „hormonal silence” to the age of 9-10 years.

3. *Adolescence* – influence of oestrogens by own ovaries.

Developmental endocrine and physiological changes during *INFANCY*

\*Neonatal follicle-stimulation FSH and luteinizing hormone LH levels rise with the withdrawal of maternal oestrogens.

\*Some stimulation from maternal placental oestrogen does occur, as a consequence the newborn female may exhibit estrogenic effects with cervical mucous production, maturation of vaginal epithelial cells, breast budding occasionally and rare estrogen withdrawal bleeding and follicular cyst development.

Developmental endocrine and physiological changes during *INFANCY*

\*Hymen may appear to be thickened and enlarged because of oestrogen exposure.

\*Uterus is palpable not for examination.

\*Lactobacilli populate the vaginal mucosa, leads to acidic pH.

\*Vaginal discharge or uterine bleeding may occur in the first 2 weeks, because of exposure to and withdrawal from placental oestrogens.

Developmental endocrine and physiological changes during *EARLY CHILDHOOD*

\*Under age 1-7 years, changes in the hypothalamus-pituitary-gonadal axis with the development of an extremely sensitive feedback system as well as central inhibition of GnRH.

\*The pH of the vagina is alkaline, and vaginal irritation is common.

\*Uterine corpus to cervix ratio is 2:1.

Developmental endocrine and physiological changes during *LATE CHILDHOOD & ADOLESCENCE*

\*Hypothalamic-pituitary-ovarian axis, starting of LH peaks at early nighttime.

\*Adrenarche (pubarche, axilarche), thelarche, menarche and ovulation occurs (average menarche is about 13 years).

Many sexual and gynecological problems are connected with processes during puberty. Puberty is the period of transition between childhood and adulthood, a time of accelerated growth, sexual maturation, and profound psychological changes.

When considering somatic sexual development, the term “puberty” is used here, which refers to the period of development when the ability to reproduce is obtained, while adolescence is a broader term that covers psychosexual development as well. The period of adolescence is related to somatic and sexual development, whose culmination is the ability to reproduce, as well as psychosexual development.

It is difficult, however to determine a tangible culmination point in psychosexual development, and it is even more challenging to measure it. This is because the final sexual development is related to psycho-emotional or social development, or the development of one’s cognitive processes.

During puberty very important is time of menarche –

the median age of menarche is 12.8 years, and the normal menstrual cycle is 21 to 35 days in length. Bleeding normally lasts for 3 to 7 days and consists of 30 to 40 ml of blood. Cycles are abnormal if they are longer than 8 to 10 days or if more than 80 ml of blood loss occurs. Soaking more than 25 pads or 30 tampons during a menstrual period is abnormal.

Regular ovulatory menstrual cycles often do not develop until 1 to 1.5 years after menarche, and 55-82% of cycles are anovulatory for the first 2 years after menarche. Anovulatory cycles typically cause heavier and longer bleeding.

Adolescents frequently experience irregular menstrual bleeding patterns, which can include several consecutive months of amenorrhea.

During the follicular phase, in the normal menstrual cycle release of gonadotropin-releasing hormone (GnRH) from the hypothalamus stimulates the pituitary to secrete luteinizing hormone (LH) and follicle-stimulating hormone (FSH), which then stimulate ovarian estrogen secretion, which

induces endometrial proliferation. Ovulation occurs 12 hours after the midcycle surge in LH.

The luteal phase follows ovulation, and the corpus luteum secretes progesterone and estrogen. Progesterone inhibits endometrial proliferation and induces glandular changes. Without fertilization, progesterone and estradiol levels decrease, and sloughing of the endometrium occurs 14 days after ovulation.

Rare, but difficult problem is teenage pregnancy. It is defined as a teenaged or underaged girl (usually within the ages of 13–18) becoming pregnant. It's not only medical problem, but social and psychological problem too. Therapeutic teams should consider not only gynecologist, but educators, psychologists and psychiatrist too [4].

One between girls gynecological problems is amenorrhea and other menstrual disorders.

Primary amenorrhea is defined as the absence of menarche by age 16. Puberty is considered delayed and warrants evaluation if breast development (the initial sign of puberty in girls) does not begin by the age of 13. The mean time between the onset of breast development and menarche is 2 years. Absence of menses within 2 to 2.5 years of the onset of puberty should be evaluated.

Secondary amenorrhea is defined as the absence of 3 consecutive menstrual cycles or 6 months of amenorrhea in patients who have already established regular menstrual periods.

Early sexual maturation prior to age 8 in girls and age 9 in boys. There are two types:

- isosexual praecocity – characteristic are appropriate for the child's genetic and gonadal sex
- heterosexual praecocity – sexual characteristic inappropriate for the genetic sex (feminizing syndrome in boys or virilizing syndrome in girls).

Delay of pubertal events beyond age 13 in girls and age 14 in boy's considered abnormal; bone age usually retarded:

\*hypothalamic tumors may result in pituitary hormone deficiencies by interfering with pulsatile secretion of GnRH

\*primary gonadal failure and the impaired secretion of gonadal steroids leads to decreased negative feedback and elevated LH and FSH levels (hypergonadotrophic hypogonadism e.g. Turner syndrome)

Development of sexual organs is closely connected with the hypothalamic-pituitary-ovarian activity.

In girls diagnostics very important is a scale for the assessment of sexual development – it is Tan-

ner scale. Tanner scale considers development of and pubic hair and axillary hair growth and breast.

The breasts should be carefully inspected and palpated.

The increasing diameter of the areola or unilateral tender breast bud is often the first sign of puberty.

1. Infantile stage with no development whatsoever.
2. Development of breast bud as small mound beneath an enlarged areola.
3. The breast and areola are enlarged still further to resemble a small adult breast with a continuous rounded contour.
4. The nipple and areola are enlarged even more to produce a secondary projection above the contour of the remainder of the breast.
5. Normal adult breast with smooth rounded contours, the secondary mound of stage 4 having been assimilated into the whole breast form.

Pediatric and adolescent gynecology is an emerging specialty, at the intersection of pediatrics, pediatric endocrinology, gynecology, genetics, pediatric surgery, dermatology, public health medicine, psychiatry and sexuology. It thus addresses a wide spectrum of diseases from the newborn period to adolescence. The adolescent, who is no longer a child but not quite an adult, poses a particular management problem to the traditional specialties [1,2,7–9].

The gynecological problems encountered in children and adolescents are often both medically and psychologically complex and thus require a highly skilled and coherent approach. One between so problem is masturbation [7–13].

Masturbation refers to sexual stimulation, especially of one's own genitals and often to the point of orgasm, which is performed manually, by other types of bodily contact (except for sexual intercourse), by use of objects or tools, or by some combination of these methods [7,12].

Masturbation is self-stimulation of the genitals for pleasure and self-comfort. Children may rub themselves with a hand or other object. Masturbation is more than the normal inspection of the genitals commonly observed in 2-year-olds during baths. During masturbation, a child usually appears dazed, flushed, and preoccupied. A child may masturbate as often as several times each day or just once a week. Masturbation occurs more commonly when a child is sleepy, bored, watching television, or under stress.

Occasional masturbation is a normal behavior of many toddlers and preschoolers. Up to a third of children in this age group discover masturbation while exploring their bodies. Often they continue to masturbate simply because it feels good. Some children masturbate frequently because they are unhappy about something, such as having their pacifier taken away. Others are reacting to punishment or pressure to stop masturbation completely [10].

Masturbation has rare medical causes, maybe after vulvovaginitis and in rare situation after sexual abuse – children respond to sexual assault in many different ways [6–8,13].

Attention is paid to the problem of early childhood masturbation, which has specific medical and psychological significance. There is a need for proper sexual education of children, adolescents and parents [6–8,12].

Information for parents: „How can I help my child”? and „When should I call my child’s health-care provider? ”

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### **Have realistic goals**

It is impossible to eliminate masturbation. Accept the fact that your child has learned about it and enjoys it. The only thing you can control is where he or she does it. A reasonable goal is to permit it in the bedroom and bathroom only. You might say to your child: “It’s OK to do that in your bedroom when you’re tired”. If you completely ignore the masturbation, no matter where it’s done, your child will think he or she can do it freely in any setting.

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### **Ignore masturbation at naptime and bedtime**

Leave your child alone at these times and do not keep checking on him or her. Do not forbid your child from lying on the abdomen and do not ask if his or her hands are between the legs.

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### **Distract or discipline your child for masturbation at other times**

First try to distract your child with a toy or activity. If this fails, explain to your child: “I know that feels good, and it’s okay to do it in your room or the bathroom, but do not do it in the rest of the ho-

use or when other people are around”. By the time children are 4 or 5 years old, they become sensitive to other people’s feelings and understand that they should masturbate only when they are alone. Younger children may have to be sent to their rooms to masturbate.

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### **Discuss this approach with your child’s day care or preschool staff**

Ask your child’s caregiver or teacher to respond to your child’s masturbation by first trying to distract the child. If this doesn’t work, they should catch the child’s attention with comments such as, “We need to have you join us now.” Masturbation should be tolerated at school only at naptime.

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### **Increase physical contact with your child**

Some children will masturbate less if they receive extra hugging and cuddling throughout the day. Try to be sure that your child receives at least 1 hour every day of special time together and physical affection from you.

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### **Common mistakes**

The most common mistake that parents make is to try to eliminate masturbation completely. This leads to a power struggle which the parents inevitably lose. Children should not be physically punished for masturbation, nor yelled at or lectured about it. Do not label masturbation as bad, dirty, evil, or sinful, and do not tie your child’s hands or use any kind of restraints. All of these approaches lead only to resistance and possibly later to sexual inhibitions.

When should I call my child’s healthcare provider?

Call during office hours if:

- Your child continues to masturbate when other people are around.
- You suspect that your child has been taught to masturbate by someone.
- Your child tries to masturbate others.
- You feel your child is unhappy.
- You cannot accept any masturbation by your child.
- This approach does not bring improvement within 1 month.

- You have other questions or concerns [12].

In rare situation masturbation can be connected with vulvovaginitis. It is important to get a good history, including the time of appearance of the lesions, whether they are congenital or not, and their evolution. Any cutaneous perineal lesion in a child should trigger a careful mucosal, cutaneous and systemic examination, in the presence of the parents if the child is young or in private according to a teenager's preferences [6,10,11].

In so situation, it is bacterioscopic examination of stained sample, clinical evaluation and occasionally precise bacterial identification are useful in diagnostic procedures. For etiological purposes, one should consider the child's age and the circumstances in which the disease occurred, as

well as the isolated or associated character of the lesions [6,10,11].

Medical, psychological and social aspects of pediatric and adolescent gynecology and sexology is the subject of many papers [1,9–14].

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## Conclusion

This study of sexuological and gynecological girl problems confirms the need for creating centers for children and adolescent gynecology and sexology which can provide medical, psychological and social information and a comprehensive aid to teenagers, children and parents.

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