

SCOLIOSIS - THE DISEASE OF THE 21ST CENTURY

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In this article, I want to focus on the topic of musculoskeletal disorders from childhood. This is a relevant topic as I often encounter this condition in my profession. There is a lot of information that can highlight the causes of scoliosis. There are several types of scoliosis.

Types of scoliosis:

1. Degenerative scoliosis

Develops in older people after the age of 50. It can be caused by various factors, such as worn-out intervertebral discs or osteoporosis, a condition where bones become brittle and fragile.

In adults, intervertebral discs do not have blood vessels and capillaries. Therefore, their nutrition occurs through “imbibition.” The less a person pays attention to their gait, posture, and physical ability at an early age, the greater the likelihood of developing degenerative scoliosis and pathological changes in general.

2. Idiopathic scoliosis (scoliosis without an external cause or scoliosis of unknown origin)

This type accounts for over 80% of scoliosis cases, excluding scoliosis caused by congenital defects, severe injury, and neuromuscular diseases. There are also three age periods of onset and development of idiopathic scoliosis:

- Infantile idiopathic scoliosis occurs before the age of 3, usually in boys. In 95% of cases, it resolves without treatment. The causes are mainly psychosomatic, such as the absence of a father (later replaced by a deity in some familiar book character), psychological problems, and parental ignorance.

- Juvenile idiopathic scoliosis develops between the ages of 4 and 10. It occurs in both boys and girls and progresses rapidly as they approach adolescence. Psychosomatically, this type of scoliosis arises from a child’s disappointment in their close ones, their gods: lies, cowardice, weakness, anger - negative qualities that children see in you. Your upbringing can impose strict limits on the child while showing complete indifference to their body, mental, and intellectual development. Authoritarianism and trampling on the child’s personality and will can be explained by your desire for their well-being.

- Adolescent idiopathic scoliosis usually appears at the age of 10-13, during the period of rapid skeletal development. This type of scoliosis progresses rapidly and is the most common. In 7 out of 10 cases, it is observed in girls. Analyzing both the physical and psychological development of children at this age, as well as their relationship with you, will help identify the cause of the disease.

3. Functional scoliosis

It is important to understand the functional shortening of the lower extremities caused by the different muscle work in the area of the hip joint. The pelvis is divided into two bones in adults, connected by passive joints: the sacroiliac and pubic joints. In childhood, the pelvic bone is divided into the iliac, pubic, and ischial bones, which later fuse together. Therefore, mechanical injuries in childhood are more dangerous, as a fracture can trigger asymmetrical fusion, leading to spinal curvature.

In adulthood, a twisted pelvis can occur. The muscles that try to keep it in a neutral position (the gluteus medius, iliacus, and rectus femoris muscles) work unevenly. Gait changes occur. Muscle “acidification” and fatigue happen. In a twisted pelvis, the sacrum also changes its position, and the sacrum is the foundation of the spine. When the sacrum tilts, the vertebrae rotate around their axis, leading to scoliosis. The coccyx also undergoes deformation. Although it may seem like a vestigial structure, the coccyx is actually attached to the pelvic floor muscles, which can lead to their dysfunction and dysfunction of the organs in the pelvic area.

Anatomical shortening and mechanical damage can occur in any joint of the lower limbs and the bones themselves. Due to such injuries, the bones of the lower limbs can have different lengths, causing asymmetrical body positioning.

With any type of scoliosis, it is important to work on both the psychological and As a “Master” in the restoration of the musculoskeletal system, I recommend keeping in mind some important rules:

1) If there is a leg length discrepancy, consider using orthopedic insoles if it is not possible to eliminate the asymmetry. Over time, the heel of the shorter limb adjusts during the process.

2) Avoid applying the method of “bone setting” (joint manipulations) without proper soft tissue work.

3) It is essential to incorporate asymmetrical exercises, especially for scoliosis beyond the second degree. The body is accustomed to the curved position, so it takes time for the nervous system to adapt to the less comfortable but correct position.

4) The earlier you start correcting scoliosis, the better. In adulthood, the bones stop growing, and ossification occurs. It becomes impossible to change the shape of the vertebra. However, you can maintain proper symmetrical muscle tone through constant self-correction. The conclusion is that continuous self-correction will keep the body aligned.

5) Pay attention to the condition of the foot and give it as much attention as other muscle groups.

6) With a twisted spine, the function of internal organs is affected. Visceral practices are invaluable. All diaphragms in the body must function correctly and freely.

An excellent method is Katarina Schroth’s technique. The Katarina Schroth Method is a complex of exercises that takes into account the individual characteristics of the patient’s spinal curvature. The main goal of the Schroth technique is to restore the natural position of the abnormal and curved spine, if necessary, by rotating,

elongating, and maintaining it in a three-dimensional plane. Link to the website: <https://zabolelo.com/istoriya-razvitiya-gimnastiki/>

Types of curvature:

- C-shaped scoliosis
- S-shaped scoliosis

The degree of curvature is determined by the Cobb angle. According to the Cobb qualification, there are five groups. Scoliosis can also be determined through X-ray images in a standing position.

It is important to remember that when signs of scoliosis appear, the problem should be addressed immediately. It is better to eliminate dysfunctions as early as possible. Otherwise, in adulthood, there may be little desire to take action, and it becomes difficult to change the habitual body position in space.

Prevention of musculoskeletal system disorders includes daily physical activity and being active. Don't allow yourself to be lazy. You are an example for your child! There is no point in correcting your child if you yourself are lazy! We are an example for our descendants, their support! Wishing everyone good health, Yours sincerely, Ivan Yeltsov, Osteopath.

List of references:

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 - "Healthy Spine" by I.P. Neumyvakin.
 - "Manual Medicine" by Karel Lewit (Doctor of Medical Sciences).
 - "Structural Osteopathy Manual" by Thorsten Liem and Tobias K. Dobler.
- physical aspects, including exercises.

УДК 615.322:635.621.4:54.061/.062

ДОСЛІДЖЕННЯ ФОТОСИНТЕЗУЮЧИХ ПІГМЕНТІВ ЛИСТЯ ПАТИСОНІВ

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Актуальність. Родина гарбузові (*Cucurbitaceae*) є джерелом багатьох цінних харчових рослин. Нашу увагу привернули патисони (*Cucurbita pepo* L. var. *patisson* Duch., *Cucurbita pepo* L. var. *melo pepo*(L.) Filov), які вирощують у багатьох областях України.