STUDY ON THE CORRECTION OF SCOLIOSIS THROUGH MEANS OF BALL SPORTS

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Abstract

Introduction

Sedentarism, increasingly present in the modern way of life, leads to an unmonitated state of a spinal muscularity, which influences the stability of the major posture. Nowadays many activities determine the adoption of an inadequate long-term care job can cause much more serious problems.

Scoliosis is an evolutionary disease characterized by one or more lateral curvature of the spine, visible in the frontal plane, accompanied by the rotation of the vertebrae. Normally seen from the back, the column being perfect rectilinear.

Kinesitherapy recovery programs take place at all stages of the treatment of a school, but any form of physical activity, physical education in the school program, including sports performance, should be encouraged, and there is no sport that is contraindicated for scoliosis patients.

Material and methods: In the study we used research ascertaining.

Results: The purpose of treatment for scoliosis is to prevent the curvature of the spine, to correct and stabilize severe curvature. In the case of patients with scoliosis, it is possible to apply sports activities with the ball, technical exercises, specific recreational means, competitions, dynamic games or the complete practice of those sports. For example: handball, gymnastics, basketball are highly indicated for patients with scoliosis, provided the therapist's supervision and involvement is active. The activation of the patient's spirit of spirit is defining in the desire for total and active involvement in the recovery activity in order to increase its significance.

Discussion: The proposed means of action can be done in an easy way and with a limited material base, specifying a common use even in physical therapy rooms. Ball games, specific exercises and competitions can create a dynamic atmosphere where work time passes in a pleasant way what makes retirement less than retirement.

Key words: specific exercise, spine deficiency, ball sports.

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Scoliosis is the condition in which the spine is deviated in the frontal plane. The vertebral column usually curves in the form of letter C or S.

In 80% of cases, scoliosis is not known. There are two types of scoliosis - structured and unstructured.
Postural disorders can develop in variety of forms, but most types can be classified as either functional (flexible) [3], or structural (rigid) postural disorders [4].
Unstructured scoliosis includes spine curvatures without rotating it being reversible - it can occur due to pain, paravertebral muscle contractions, inflammatory causes and lower limb inequality.
Structured scoliosis includes cone curvatures with the occurrence of a rotation, these changes being irreversible, causes are usually unknown, there may be congenital anomalies present at birth. As the baby grows, these curves usually increase, especially in adolescence.
In addition to these causes, there may also be favored causes of nerve, muscle, trauma or infection.
Where loads exceed normal physiological limits consistently and over prolonged periods of time, structural changes occur in the skeletal bones. The damage of this type is usually ireversibile [1, 2].
Generally, scoliosis is not noticed by parents in childhood and adolescence if it has a mild form, but only when it is strongly accentuated. For the first time the parents notice that the child's clothing is uneven, so parents need to be careful about some aspects such as:
• Shoulder position - one shoulder may be higher than the other
• The line joining the two iliac crests is not horizontal
• The unequal length of the legs
• The head is inclined
• A higher shoulder blade than the other
• Stern can be modified due to decompensation
• The waist has different curves on the two sides
• Inequality of the prominence of the ribs on both sides of the trunk

Due to the hereditary factor, the children of women who have scoliosis should be monitored throughout the teenage period.
The purpose of treatment for scoliosis is to prevent the curvature of the spine, to correct and stabilize the curvature.
In conclusion, if a scolitic attitude is detected, it should be corrected by specific action at an early age as soon as it is observed, its non-correction leading to a worsening of the vicious position, this attitude becoming irreversible.
Due to muscle stretching on the side of convexity, and on the concave side of the muscle shortening, people with scoliosis complain of back pain. An important help in relieving back pain comes from regular exercises. Drug treatment does not solve the problem, relieving pain for the moment.
Generally, prior to the age of majority, vertebral deficiencies are likely to be fully recovered if recuperation is performed professionally by specialized personnel.
This is why all parents with children with spinal cord diseases are well advised to enroll them in personalized recovery programs as soon as possible before the bone system stops developing
In adults, scoliosis may occur as a result of:
• Degeneration processes in the spine
• Changes in the spine (osteoporosis or osteoarthritis)
• Vicious positions at home or at work
Scoliosis can influence the movements of the trunk and the whole body and, if not treated properly in time, can cause a lot of pain but also a change in the way of travel.
Scoliosis has great chances of recovery through kinetotherapy and scientifically practiced complementary sports where curves with an angle of less than 30 degrees are present. The specific exercises play a role in toning the paravertebral muscles that support the spine and alter the length of intervertebral ligaments.
There is evidence that many individual factors, such as age, gender, muscular strength, activity, sport and flexibility of

the spine and lower extremities [5] may affect the lumbar lordosis angle. It is worthy of consideration whether the degree of thoracic kyphosis and postural disturbance depends on one's style of life [6].

If the angle of curvature is between 30-45 degrees, besides the specific action of kinesiotherapy and sport with a beneficial role, it is recommended to use a corset that prevents accentuation of curvature.

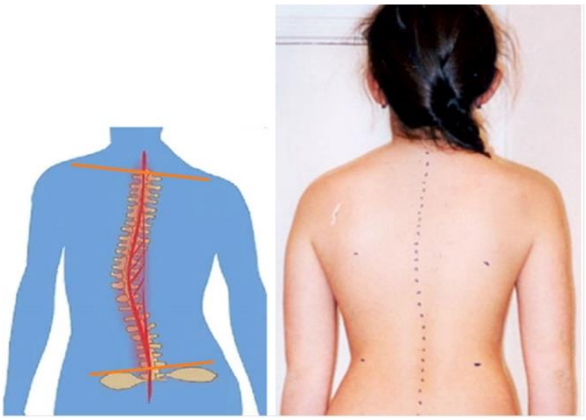

Figure no. 1

Systematic physical activity is a necessary element of normal development of a young human body [7] There are few data in the literature about the effect of the handball training on the occurrence of postural disturbance in female adolescents [8,9].

Postural disorders and asymmetry of the mus- culoskeletal system occur both in the general population and among athletes [10].

Methods:

Selection of specific means of action in ball sports to increase the efficiency of kinetotherapeutic treatment, exercises, games or even practicing sporting play entirely but with personalized professional guidance. But be careful as performance sports, or rather the excess of certain movements, can be negative for recovery.

The kinetotherapy of the scolitic attitudes must be supplemented with complex, symmetrical tattooing of the entire muscles of the back, abdomen and limbs, as well as exercise exercises for general exercise capacity can be achieved by sports and sports games, especially swimming, handball, volleyball, basketball

The methods of operation and the specific means selected have as their main objectives:

1. Correction of vicious posts through: corrective postures (coordination and self-coordination) and hypercorrective postures with antalgic character.
2. Combating musculo-ligamental imbalances.
3. Development of muscle groups necessary to maintain correction achieved through specific recovery exercises and medical gymnastics.
4. Awareness of correct positions of the spine, shoulders and basin by adopting correct posts.
5. Maintaining and correcting the posture and body alignment throughout recovery.
6. Increase and restore articular and muscular mobility, gradually.
7. Toning of affected muscles in shortening and elongation
8. Correcting and maintaining muscle tone through exercise and medical gymnastics.
9. Increase in strength and resistance at lumbosacrate level.
10. Educated and re-educated awareness through patient perception, balance sensations, orientation of space

movements, verticalization and body inclination; the sensation of rectilinear motion; the feeling of rotation; the viewing sensation; the sensation of laterality

Results

In the case of patients with scoliosis, we can apply from the ball sports activities, technical exercises, recreational means, competitions, dynamic games or the complete practice of those sports. For example: handball, gymnastics, basketball are very popular sports for scoliosis patients, provided the therapist's supervision and involvement is active. The activation of the patient's spirit of spirit is defining in the desire to involve him fully and actively in the recovery activity for its significant efficiency.

Handball Exercises

1. Goalkeeper throw at 6m from a very small angle to the gate or outside the goal line. The exercise is executed with the hand on the concave side and with the support on the leg on the convex side. It can also be run as a contest.

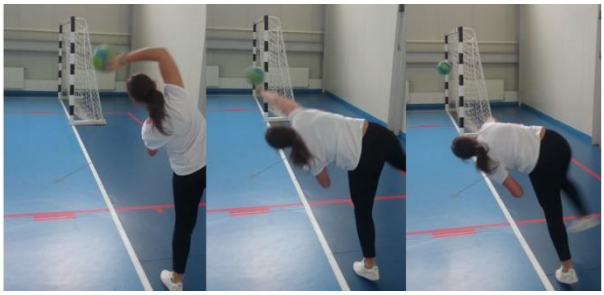

Figure no. 2. Exercise no. 1.

2. On the wall throws to the side or between two by passing the ball across the basin, executed by hand on the side of the convexity, and resting on the opposite foot.

Figure no. 3. Exercise no. 2

3. Jumping goal throws executed over another movable gate or bar. It runs with the hand on the side of the thoracic concave with beating on both legs. It can also be organized as a contest.

Figure no. 4. Exercise no. 3

Rhythmic gymnastics gymnastics exercises:

1. From the bald costume with the ball, held with both hands up, lifting the trunk on the side of the thoracic convexity.

Figure no. 5. Exercise no. 1

2. Standing away from the ball with both hands up, bending the trunk towards the chest convexity, simultaneously with the lateral lifting of the foot on the same side.

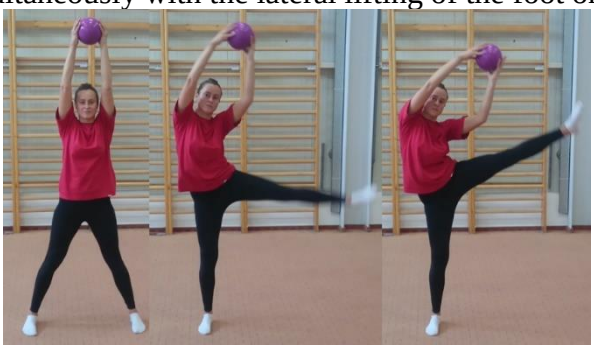

Figure no. 6. Exercise no. 2

3. From the bald costume with the ball, held by hand on the side of the chest convexity, lowering the side arm, lifting the trunk and the leg on the same side.

Figure no. 7. Exercise no. 3

Polo Exercises

1. Turning the balls thrown to the crossbar with the hand on the thorax concave side. It can also be organized as a contest.

Figure no. 8. Exercise no. 1

2. Repeat passes to the side by passing the ball over the head, executed by hand on the concave side.

Figure no. 9. Exercise no. 2

Football exercise

1. Keeping the balls in the air with the outside, executed with the foot on the side of the chest convexity.

Figure no. 10. Exercise no. 1

Discussion:

The proposed means of action can be made in an easy way and with a reduced material basis, for a common use in the kinesitherapy cabinets. Ball games, specific exercises and competitions can create a dynamic atmosphere where work time passes in a pleasant way which makes leaving the recovery sessions smaller.

Conclusions

The scolitic attitude, especially that of unstructured causes, is common and diagnosis as early as possible and appropriate treatment allows the patient to maintain a normal physiological position or as close as possible to it.

The proposed exercise program is effective because it requires groups of muscles, tendons and other formations that are involved in improving the scoliosis.

Working with the ball adds a dynamic and varied character, is more exciting for patients and maximizes therapeutic benefits.

Exercises make it easier to adopt a correct position, which can then be strengthened.

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