The Klapp method

History

Rudolph Klapp (1873–1949) was a German orthopedist, he was interested in patients with poor posture and scoliosis, which was previously only treated with passive correction. He observed four-legged animals and found that the position on 4 is very favorable for the spine from an orthopedic point of view and that scoliosis does not occur in quadrupeds .

Indication

Originally, the concept was only indicated for idiopathic scoliosis. Now its use has been extended to all types of scoliosis, poor posture, Scheuermann's disease , Bechterev's disease , DMO and functional disorders of the locomotor system.

Contraindications

HK and DK impairments that make it impossible to take the starting position or stay in it. Furthermore, mental and motor inability to understand or perform the exercise.

Utilities

It is important to perform Klapp's methodology on a slippery floor (lino, floating floor, tiles) with knee pads and hand pads (classic cotton kitchen gloves are used in practice).

Principles of performing exercises

There are 4 basic elements:

- stretching;
- strengthening;
- mobilization;
- correction.

Each exercise must contain at least 3 of these basic elements. 3 points of support must also be maintained in the three non-moving limbs, the centering of the root joints (shoulders, hips) is important and we must not forget the co-contraction of agonists and antagonists.

Basic position

It is the starting position for all exercises. We start from the kneeling position on all fours, the knees are 90° to the torso and they are set to the width of the pelvis. The hands are placed at shoulder width, the arms are extended at the elbows, the fingers point forward. The head is in slight extension looking forward. Conscious activation of the deep stabilization system.

Basic position

Exercises

1. ***Climbing on all fours***
   - **direct current** :
     - VP: kneeling on all fours;
     - execution: first we move approx. by 5–10 cm one DK, then move approx. by 5–10 cm homolateral HK, we repeat the same procedure for the contralateral limbs;
   - **crossed :**
     - VP: kneeling on all fours;
     - execution: first we move approx. by 5–10 cm one DK, then move approx. by 5–10 cm contralateral HK, we repeat the same procedure for the contralateral limbs.
   - **with head turning:**
     - it is a complement to both crossed and straight climbing on all fours, we just turn our head towards the stepped limb;
     - purpose of the exercise: centers the root joints, improves the mobility of the spine, especially for rotations, strengthens the HSS.
2. ***Pushing forward***
   - VP: from kneeling on all fours, we move forward, the chest touches the mat, elbows in flexion and slight abduction;
   - execution: one DK moves approx. by 5-10 cm, let the chest and arms slide freely forward, repeat with the second DK;

- purpose of the exercise: mobilization of the spine in its thoracic part into extension, stretching of the pectoralis major et minor muscles, deepening of breathing thanks to the position of the chest.

3. ***Serpentine ripples***
   - VP: from kneeling on all fours, we move forward, the chest touches the mat, elbows in flexion and slight abduction;
   - execution: we pull out alternately behind one HK, then behind the other, DK still remain in their original position;
   - purpose of the exercise: mobilization of the spine in its thoracic part into extension, stretching of the pectoralis major et minor muscle, stretching of the quadratus lumborum muscle (on the contralateral side of the "wave").
4. ***Hare jump***
   - VP: from kneeling on all fours, we move forward, chest touches the mat, elbows in flexion and slight abduction;
   - execution: we go into an upright knee, HK go into a brace, slowly return back to the VP, we can insert a push-up, we pull the knees under the body;
   - purpose of the exercise: gradual stretching and activation of the back and abdominal muscles, strengthening and activation of the stabilizers of the shoulder blades (mainly serratus anterior muscle , then mm. rhomboidei , lower trapezius muscle).
5. ***Hare jump with spin***
   - VP: from kneeling on all fours, we move forward, chest touches the mat, elbows in flexion and slight abduction;
   - execution: we go into an upright knee, HC go to brace, slowly return to VP, swing one HC with head rotation to the homolateral side, swing the second HC with head rotation to the homolateral side, return to VP, pull the knees under the body;
   - purpose of the exercise: activation of the back muscles, strengthening of the trunk rotators.
6. ***Deep creep***
   - VP: from kneeling on all fours, we move forward, chest touches the mat, elbows in flexion and slight abduction;
   - execution: we step with one knee, the homolateral arm is flexed at the elbow, fingers point forward, we extend the contralateral DK at the hip, the pelvis is overturned, we let the DK hang freely, the contralateral arm goes into bracing and let it hang freely;
   - purpose of the exercise: stretching of the back muscles mainly in the chest area, centering the root joints on the homolateral side.
7. ***Spider with a stretch***
   - VP: kneeling on all fours
   - execution: HK goes into abduction, elbows are flexed to 90°, chest drop, then we extend the elbows, the whole spine is kyphoticized, back to the "spider", one DK takes a step, displacement of both HK, the other DK step;
   - purpose of the exercise: strengthening of the fixators of the shoulder blades, muscles of the upper limb and mm. pectorales (when moving back to VP), spine mobilization (without extension).
8. ***A spider with a bowed torso***
   - VP: spider position (exercise no. 7);
   - execution: one step DK, bending of the entire trunk to the homolateral side, kyphoticization of the entire spine, back to the VP, exchange of legs;
   - purpose of the exercise: strengthening the lower fixators of the shoulder blades, the muscles of the upper limb and mm. pectorales (when moving back to VP), stretching the spine into letaroflexion.
9. ***A spider with a circular arm movement***
   - VP: spider position (exercise no. 7);
   - execution: step once DK, the contralateral arm performs a crawling movement and thereby moves approx. by 5–10 cm, the same on the other side;
   - purpose: strengthening the trunk muscles.
10. ***A large arch***
    - VP: kneeling on all fours;
    - execution: step once DK and at the same time contralateral HK goes up, head turns to static HK, static HK is flexed at the elbow, the other HK is extended in an arc into a bow to the ground, extended describes a semicircle and returns to the VP, the same on the other side ;
    - purpose of the exercise: strengthening the trunk muscles, stretching the spine into lateroflexion.
11. ***Horizontal arc***
    - VP: kneeling on all fours;
    - execution: step one DK, the second DK with homolateral Hk go into stretch, bending the trunk to static limbs, crossing the stretched limbs over the axis, back to VP, the same the other side;
    - the purpose of the exercise: strengthening the trunk muscles, stretching the contralateral side, strengthening the muscles of the supporting limbs, "opening" the ribs on the contralateral side.
12. ***Walking on knees***
    - three positions at the height of the trunk (mobilization of different segments of the spine) above the horizontal, in the horizontal and below the horizontal;
    - can be combined with head rotation and with different HK positions;
    - the purpose of the exercise: it changes according to the position of the body (depending on the height, the targeted segment of the spine also changes), strengthening mainly the abdominal and back muscles.

Klapp's upgraded climbing

Innovation was championed by Jarmila Čápová, who enriched Klapp's climbing with elements of Basal postural programs such as manual centering, preparatory work in attitudes of 3-5 months, basal sitting, etc.

Currently, it is possible to get acquainted with the concept of Innovative Klapp's climbing - quadrupedal locomotion in prevention and treatment at an accredited course of the MZČR.

Links

References

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