

IDENTIFY APPLICABLE MODELS AQUATIC THERAPY IN POSTTRAUMATIC RECOVERY

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Abstract

To obtain optimum efficiency, aquatic therapy plans must include required elements derived from the swimming motion. As already mentioned, the introduction of these elements required for learning was preceded full and correct at least two styles of swimming and subject to stringent measures of compliance safety and first aid for work in the swimming pool.

Swimming is an activity "total" combined movements involving the upper and lower extremities with the trunk. Also there have exemplified the principles by which we lead in introducing these changes, the styles of swimming.

Almost all processes can provide swimming pool movements perfectly suited to our intended therapeutic purpose. Most often I used the stamp of the crawl process (free), in its original form or slightly modified. In addition you can use movement styles breaststroke legs, butterfly and even sideways.

Conclusion: As an extreme change, we practiced restraint in the extension of the legs, while forward thrust is achieved only on the upper limbs. Is a variant of the hanging position in deep water, but it has an advantage that the active component, represented by the upper limb traction, which can be changed continuously and without leaving the pool. Immobilization can be done by attaching weights to the ankles tied to each other or restraining elastic ankles with rope.

Key words: swimming items, supine, freestyle, backstroke

Introduction

Elements of swimming with application programs recovery of the lower limbs

To obtain optimum efficiency, aquatic therapy plans must include required elements derived from the swimming motion. As already stated above, the introduction of these elements was preceded compulsory learning correct and complete at least two styles of swimming and put stringent measures of compliance safety and first aid for work in swimming pool.

Swimming is an activity which combined movements involving the upper and lower extremities with the trunk. Also there have exemplified the principles by which we lead in introducing these changes, the styles of swimming. Outlined below are the movements that we included in our programs for aquatic therapy, physical segment and with respect for basic movement style applied. Almost all processes can provide swimming pool movements perfectly suited to our intended therapeutic purpose. Most often I used the stamp of style crawl (free), in its original form or slightly modified. In addition you can use the styles breaststroke leg movements, and even sideways butterfly

1. Enforcement positions Although practically swimming motion movements of the feet can run in any position submerged (floating supine on belly, side, or down), getting a perfect postural alignment is done only in those positions where the momentum generated stamp it comes to compromise the request of the spine with extra charge. For this reason we have removed almost completely from care plans stamp in vertical position, with or without support from the basin edge, this position, although they preferred because of convenience, calls exaggerated cervical spinal floors (always kept outside the water) and the lumbar (main receiver impulse propellant). Since postural alignment is inversely proportional to the degree of load / request of the spine, the most effective postures and so with a good alignment of the spine are lying (dorsal, ventral and right side).

Lying on his stomach, with or without support, eliminates most requests on the back. (D Antonescu., M. Buga, CConstantinescu I., N.Iliescu 1986)

But once the feature is the need of breath, either by removing the head surface with increased degree of torsion, or by keeping it permanently above water, with increased cervical extension.

Increased support is possible through support provided by a raft of upper limbs and a belt floats in the pelvis. Requests to increase the level of thoracic and scapular belt, I put the float in the upper limbs outstretched extremity. Moreover, its buoyancy will keep head above water, providing a breath without further extension or twisting of the cervical spine.

Supine position, with or without support, offers many advantages, particularly regarding postural alignment. The first and most obvious issue is the possibility of airway breathing without the need to be permanently float. Another advantage is the possibility of placing the elements at any level floats from head and neck and ending with the pelvis, which shows a higher postural alignment without increasing unwanted applications.

Fluctuation prevent excessive hip and spine, upper limbs can stretch over your head, in submersion. As disadvantage we mention that this position requires the provision of increased buoyancy and perfect mastery of style, especially behind. Lying on its side, with or without support, requires placing the main scoliotic condition spine with convexity of a superior curve. In this position the upper airways are placed under water and so the mere act of breathing becomes a therapeutic time, involving lateral flexion of head and neck, with a tendency to reduce bias scoliotics. Moreover, there is always beating feet under water, so efficiency is almost doubled year. It is a very advantageous position for curves greater amplitude but requires a fairly high degree of training and then some practical experience in swimming. We applied this position in subjects already depicted correct procedures and crawl back in later stages of the therapeutic plan as an exercise for toning, strengthening and maintaining the progress already achieved. Due to specific conditions and characteristics of its execution, not the postures recommended for double curves (scoliosis of the "S"): When seeking the perfect spinal alignment and a neutral tone, so in advanced stages of programs Recovery is recommended position lying on belly, with swimming goggles and breathing tube, keeping the head and neck submerged, thoraco-lombar spine in extension.

These devices allow perfect alignment of the spine and also cancels the need for respiration by twisting or lifting (extension) head, which remains submerged and thus decreases twisting or extension cord at cervical and upper thoracic.

2. Swimming styles applied Regarding legs are

practically beating four basic styles that can be used in therapeutic programs namely:

- stamp of style crawl (free and / or rear)
- stamp of style breaststroke;
- dolphin stamp of style (butterfly)
- Side stamp of style.

2. Stamp of style crawl (free and / or rear)

Movement occurs in the thigh and involves alternating up and down (flex-extension) of the entire leg. Plantar ankles and legs are bent, with slight internal rotation. If free movement style is flexible thigh main engines (beating to the bottom of the basin), with knee slightly bent, it becomes perfectly flat to move up. Heels may come partly from the water, but only for short periods. If the situation is reversed style rear part, movement of the main engines are increasingly flexing thigh, but leg lifting to the surface. In this situation allows the fingers exit the water, also for short periods. If the situation is reversed style rear part, movement of the main engines are increasingly flexing thigh, but leg lifting to the surface. In this situation allows the fingers exit the water, also for short periods. Cadence leg movement in relation to the arms of time varies from 2-6 beats. Amplitude of movement will not exceed 30 cm and is not allowed complete removal of feet of water. Motion is maximum efficiency when running from the thigh and knee. If scoliosis involving the lower spinal segments (back), especially in the early stages of treatment, we introduced a slight modification of this type of move which consisted of performance beat feet to the thigh and partly bent knee (somewhat similar to cycling) due to lower lever arm and segment length submersible power needed to produce movement is reduced significantly, while reducing the request to the trunk. Obviously in this situation, due to lower volumes and decreased submerged buoyancy, which led to the need for belt floats. Special attention we gave her a degree of scoliosis with vertebral rotation. In these cases, breathing is made by rotating the head to the water surface was obligatory by turning the rotation opposite vertebral bodies.

3. Breaststroke style stamp of bilateral symmetry is a movement whose starting position is lying on stomach with legs outstretched. Begin by simultaneously flexure of cospa and knees, with gradual abduction of the thighs, while environmental and heels to buttocks.

By its very structure for deployment, the stamp generates pulses breaststroke style staple propellant, turned clear and the trunk. To reduce this level of demand, we introduced a slight modification which consists in reducing the medial

hip rotation, which will automatically decrease the propulsion phase applications. In addition, educational reasons and / or convenience of the subject, you can run and move from a lying back, neck support and basin

Even in these circumstances by its bilateral symmetry, if scoliosis therapeutic contribution of this type of movement is relatively small. We used the stamp of style bras predominantly supine position, especially in the final stages of each microcircuit training for active recreation and relaxation post fort

4. Stamp of style dolphin (butterfly)

Is the movement of swimming with the highest attractiveness to the torso, directly relying on flexibility, strength and resistance lower back regions, abdomen, buttocks and legs.

Legs describe virtually the same motion as in crawl style, except that they move simultaneously throughout the motion. The movement has its origins in the torso and thighs, most of the impetus being provided by the rapid extension of the legs. Knees are slightly bent throughout the movement and lowering deployment perfectly stretched to climb. Ankles remain relaxed throughout the movement.

Structure, style dolphin stamp involving the whole body, being subject to more flexible spine than the lower limb muscle strength. Which is why I used it extensively in peak phases of therapy programs. Limiting the application of this style is based on its complexity, it is a challenge even for experienced swimmers.

Extreme demands appear lying on her tummy and can be much reduced by changing the position back or side. These are facts and positions applied in the early stages of therapy, or at the beginning of each microcircuit. (N., Bogduk, 1991).

All therapeutic reasons have changed downward movement execution rate, the relaxation of the knee joint to decline the request, and particularly of the ;strong in a curling motion type, involving the whole body, much less demanding. This style does not apply to associated malformations of the spine gibozitate type.

5. Stamp lying on side.

Is a bilateral lower limb movement that starting position is lying on its side, with upper limb extended overhead and submerged at opposite aligned along the body. It begins with simultaneous flexion of knees and thighs, followed by dorsiflexia ankles. When thigh is the trunk at an angle of about 45°, is placed underneath and start thigh flexion extension of

the above, so that is placed over the leg above and below the posterior trunk. Water is pushed positioned above the plant foot and dorsum of the site put back. At the end of propulsion, both knees are fully stretched and bent the ankles, after which the cycle repeats. As a general rule, we positioned subjects so scoliosis curve is always oriented convexity (APEX) higher. To increase buoyancy devices can be placed to increase buoyancy, fixed in the armpit of the surface water and / or the ankle. Not applicable as floats in the pelvis to compel the subject to remain active and thus compensate for permanent alignment curve scoliosis.

Conclusion

Position is more effective, but has always been subject to a fairly high degree of training, it is a position not recommended for multiple curves. As a variant of it, with questionable effectiveness, however, may reverse the position of the two States so the lower leg to be placed above the rear and vice versa.

Leg immobilization

As an extreme change, we practiced restraint in the extension of the legs, while forward thrust is achieved only on the upper limbs. Hanging position is a variation in deep water, but has the advantage that they have an active component, represented by upper limb traction, which can be adjusted continuously and without leaving the pool. Immobilization can be done by attaching weights to the ankles tied to each other or ankles with rope. (M.Cordun, 1999).

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