

THE GOALKEEPER ON THE BENCH

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Introduction

The present paper provides the theoretical and methodical presentation of some practical experiences gathered while training the senior men's and women's handball teams along the years.

The exercises proposed are meant to be performed during the moments when no specific effort is required to defend one's goal, both during the matches and while training.

Why did we choose these moments?

❖ Because for goalkeepers, the physical exertion is different in comparison to the field players, with extremely special psycho-neuro-motor strains.

❖ Those moments of physical inactivity either after returning to the bench, preparing for substitution, or simple during the match, may result in the loss of either the excitation state needed when playing or the warm-up at the joint, ligament and muscle levels.

Aim and finality

Relaying on my rich practical experience, I have noticed that the moments in which goalkeepers are not directly involved in defending their goal, either during the match or while training, can be taken advantage of by using certain types of exercises which, by acting on some body zones, keep the exertion threshold at a suitable level and develop, in parallel, a series of sensory-motor aspects.

For these reasons, the present paper proposes a variety of exercises used by us along the years in the training of national and club teams, both in men's and women's handball game.

Utilitarian applications

The exercises proposed by us for “the goalkeeper on the bench” are based on “stretching” techniques and on active, dynamic movements that, particularly during the game, can be performed without impeding the requirements imposed by the game regulations.

Their aim consists of keeping the neuromuscular excitability under the conditions of musculo-ligamentary suppleness and sensory-motor control development.

The exercise efficiency and correctness, as well as the practical exercise valorization, are based on the goalkeepers’ prior instruction in the technique of performing the “stretching” procedure and in that of becoming aware of the muscle action - in alternating static and/or dynamic contractions with stretching and relaxation.

From all the proposed exercises, goalkeepers may choose the movements appropriate to the moment of play, preparation, training state and so on, either by themselves or following their trainers’ instructions.

Work principles

- Control on: stretching, pain-stretching relation, segment position:
 - ✓ progress within the joint mobility limits, through progressive slow motions, without reaching the pain threshold;
 - ✓ accurate localization at each muscular group level;
 - ✓ attention focusing on the primarily activated zone;
 - ✓ becoming aware of the sensations onset at the muscular level, as a response to exertion.
- Controlled breathing: normal breathing, without blockage.
- Relaxation of the muscle groups prior to stretching.
- Reduction of muscular activity of the body parts that are not involved into stretching or into the position fixing, as much as possible.
- Specific alternation of the contraction types (isometric, concentric and eccentric ones) with relaxation and stretching.



**INDIVIDUAL EXERCISES
ON THE BENCH
DURING THE GAME OR
WHILE TRAINING**

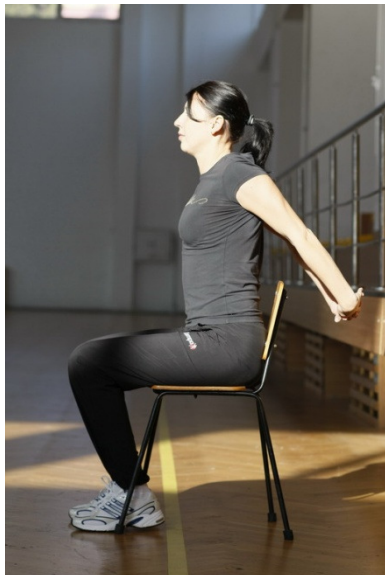
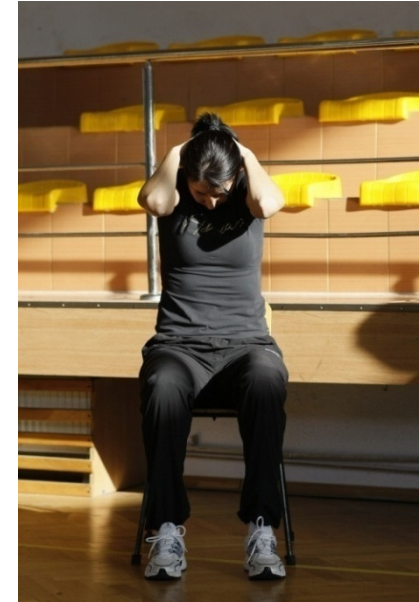


EXERCISES FOR
TRUNK
AND
UPPER LIMBS



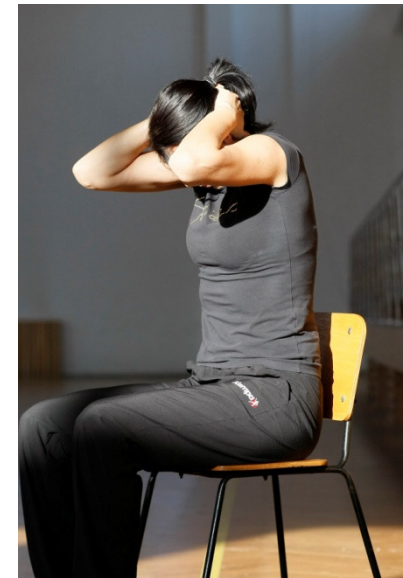
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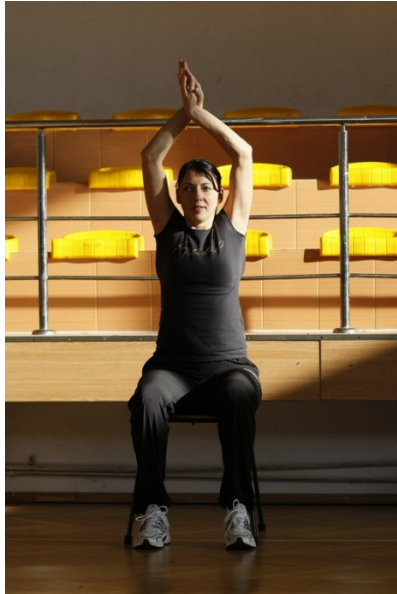
Initial position: sit on bench, hands on neck
Action: head pushed backwards against hands, dorsal muscles tensed – **maintain for 5 to 8 sec**
Relaxation: 2 to 3 sec
Action: hands on neck, forearms closer to ears, elbows pushed forward while leaning the head: muscles stretched at the neck and shoulder girdle levels – **maintain for 5 to 8 sec**
Repeated : 2 to 3 times



2.

Initial position: sit on bench, arms backwards and downwards with palms together, fingers crossed
Action: arms raised backward as high as possible: chest muscles stretched – **maintain for 8 to 10 sec**
Relaxation: 2 to 3 sec
Action: arms raised forward, hands on neck, forearms closer to ears, pushing at shoulder level: stretching on muscles at the scapula level – **maintain for 8 to 10 sec**
Repeated : 2 to 3 times





3

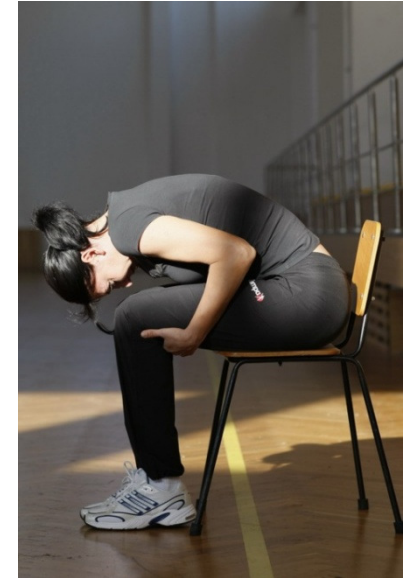
Initial position: sit on bench, arms upwards, elbows slightly bent, palms clenched

Action: strong push into palms: arm and shoulder girdle muscles tensed, with an emphasis on the dorsal region – **maintain for 5 to 8 sec**

Relaxation: 2 to 3 sec

Action: back bent forward, rounded on thighs, arms downward with palm grip under knees: stretching on the muscles previously strained – **maintain for 5 to 8 sec.**

Repeated: 2 to 3 times



4

Initial position: sit on bench, arms downwards

Action: shoulder joint internal rotation – **maintain for 5 to 8 sec**

Relaxation: 2 to 3 sec

Action: shoulder joint external rotation – **maintain for 5 to 8 sec**

Repeated: 2 to 3 times





5

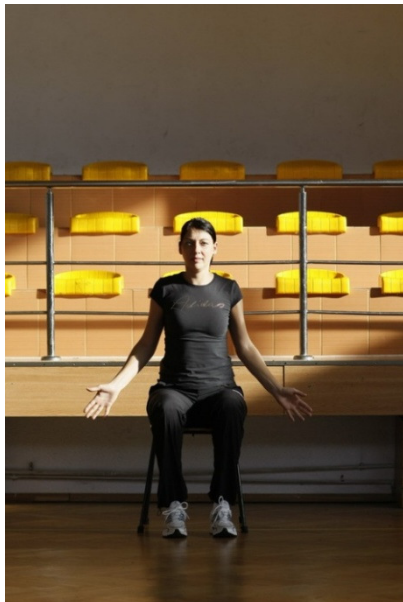
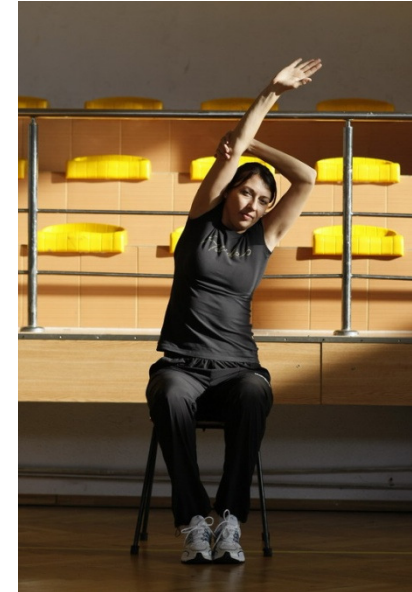
Initial position: sit on bench, arms upwards, the right one stretched, the left one bent, grips with palm the right elbow

Action: pushing the right arm sideways against the left hand resistance: right sideways muscles tensed – **maintain for 5 to 8 sec**

Relaxation: 2 sec

Action: the left hand pulls the right arm: the previously tensed muscles stretched, with a slight sideways trunk bent – **maintain for 5 to 8 sec**

Repeated: 2 to 3 times each side



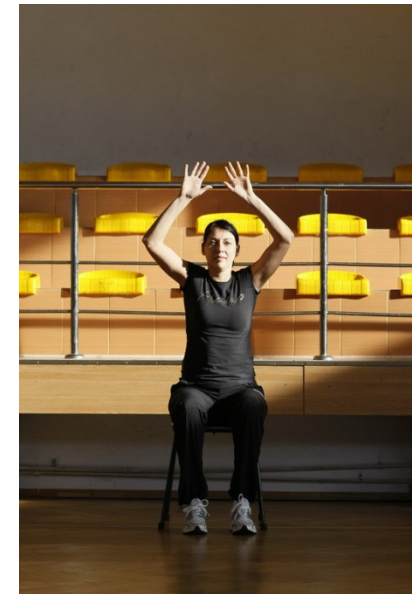
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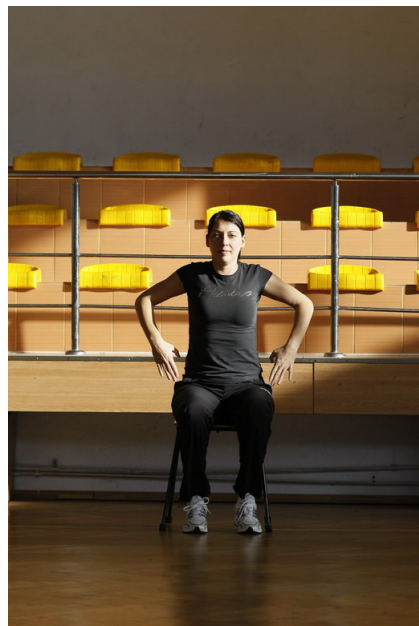
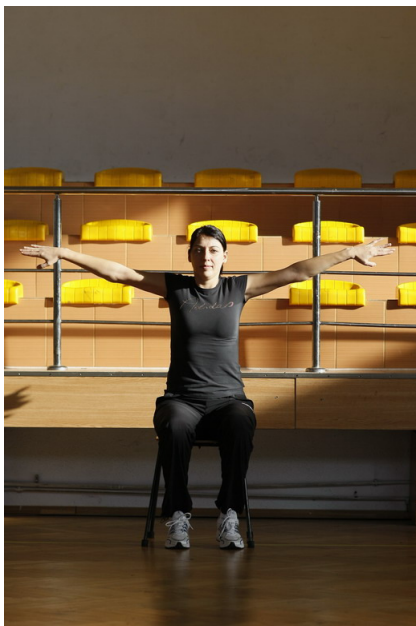
Initial position: sit on bench, arms downward

Action: raise arms sideways & upwards with quick, energetic movements: repeat 3 to 5 times, then relax for 2 to 3 sec. Work can be simultaneously symmetrical or alternative.

Variant: movement performing in the opposite sense: arms upwards, arm quickly lowering and slowly regaining of the initial position

Repeated: 2 to 3 times each side



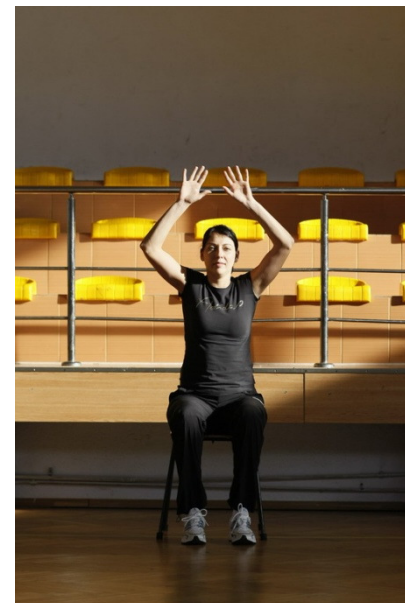


7

Initial position: sit on bench, arms sideways

Action: forearm quick bending on the arm towards the body and/or the head – **3 to 5 movements followed by relaxation**

Repeated: 2 to 3 times each side



8

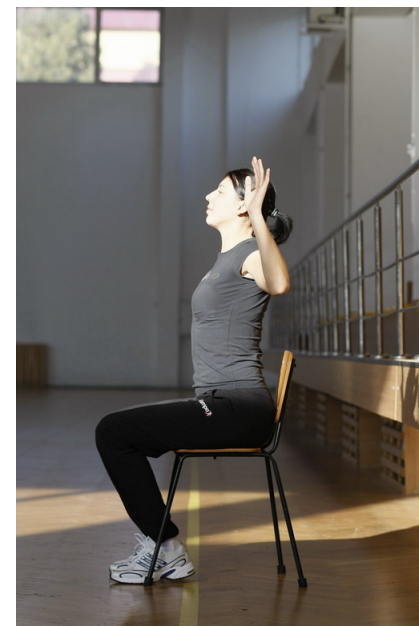
Initial position: sit on bench, arms sideways, elbows bent at 90°

Action: arms slightly carried forward, with pectoral muscles pushed and tensed – **maintain for 5 to 8 sec**

Relaxation: 2 to 3 sec

Action: arms carried sideways, slightly backward, with dorsal thoracic muscles pushed and tensed – **maintain for 5 to 8 sec**

Repeated: 2 to 3 times





9

Initial position: sit on bench, arms downwards

Action: arm rotations alternatively and/or simultaneously

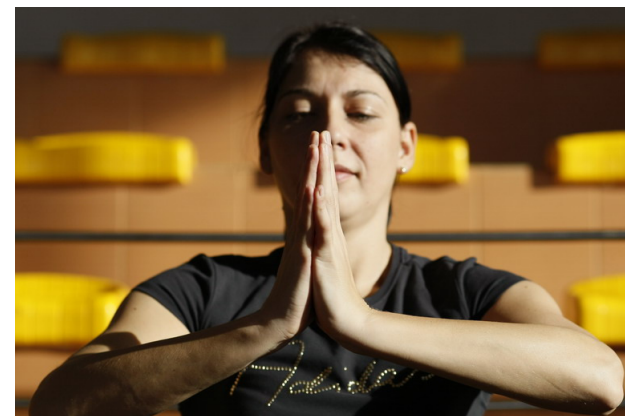
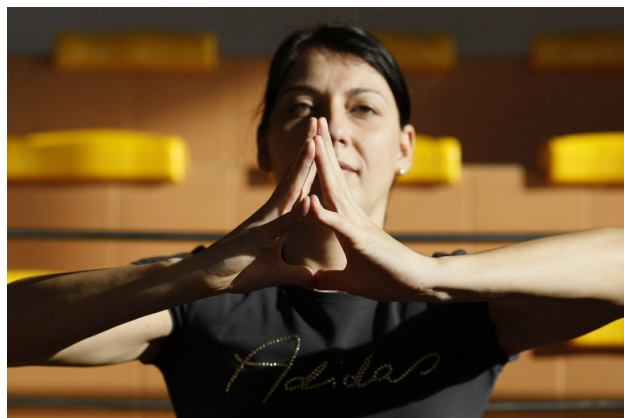


10

Initial position: sit on bench, arms forward, elbows bent, fingers slightly apart one against the other

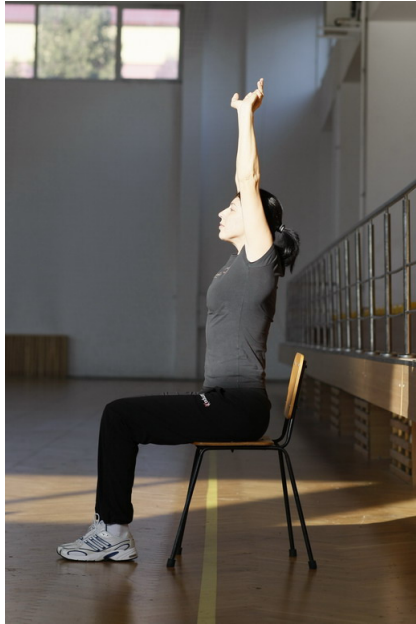
Action: finger pushing, palms brought together then separated

Relaxation: palm muscles stretched at a time with the opposite hand





EXERCISES FOR
TRUNK
AND
LOWER LIMBS



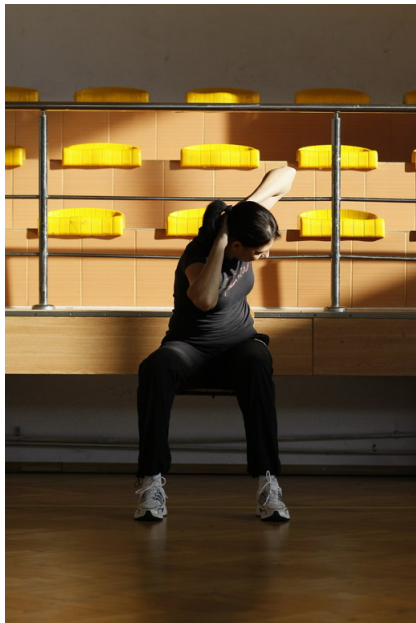
1

Initial position: sit on bench, arms upwards
Action: prolonged stretching along spine with slight arm extension – **maintain for 5 to 6 sec**
Relaxation: 2 to 3 sec
Action: Trunk bending forward sitting on thighs, back rounded – **maintain for 8 to 10 sec**
Repeated: 2 to 3 times



2

Initial position: sit on bench, legs straddled at shoulder level, hands on neck
Action: trunk bent, right shoulder closer to left knee: right sideways muscles of the trunk tensed, while the left ones are stretched – **maintain for 8 to 10 sec**
Relaxation: 2 to 3 sec
Action: exercise repeated on the left side
Repeated: 2 to 3 time each part
 * It can also be performed by rotation while bent (elbow at the opposite knee)





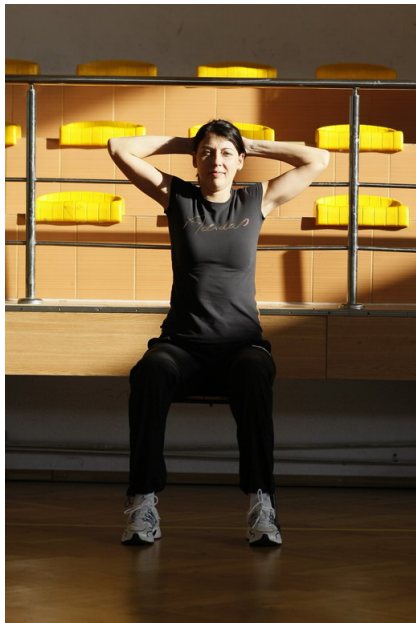
3

Initial position: sit on bench, arms upwards, elbows bent, grip on forearms

Action: slightly bent to the right sideways, by stretching forward and turning trunk – **maintain for 5 to 8 sec**

Regaining the initial position on the opposite direction

Repeated: 2 to 3 times each side

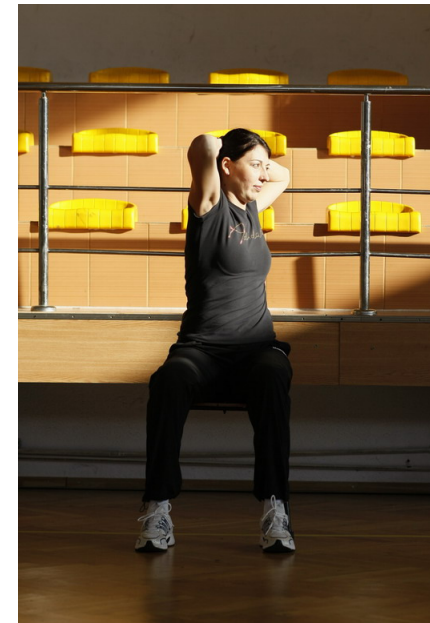


4

Initial position: sit, hands on neck

Action: trunk turning right and left – **maintain for 8 to 10 sec**

Repeated: 2 to 3 times each side





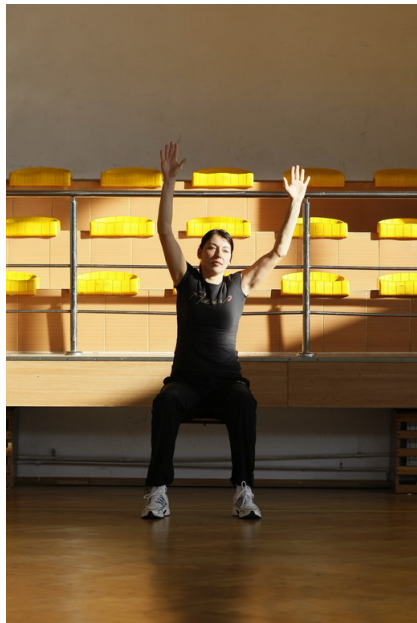
5

Initial position: sit, trunk bent forward, chest on thighs

Action: right hand on the left ankle, left arm sideways, ample trunk turned to the left, eyes facing the ceiling – **maintain for 8 to 10 sec**

Regaining the initial position with a 2 to 3 sec relaxation

Repeated: 2 to 3 times each side



6

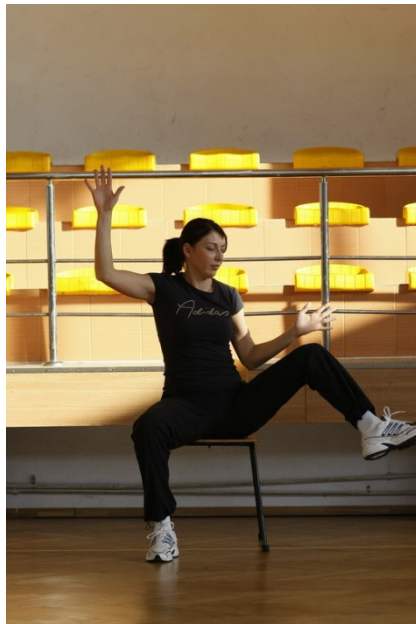
Initial position: sit, arms upward

Action: one arm lowered sideways and downwards, by turning the trunk sideways and regaining the initial position, **speed rate performing**

Repeated: 6 to 8 times each side

7

Initial position: sit, arms upwards
Action: an arm lowering sideways, while simultaneously raising the knee towards the shoulder – **speed rate performing**
Repeated: 6 to 8 times each side



8

Initial position: sit, arms downwards
Action:
*passage to forward lunge on the right foot - **maintain for 10 to 15 sec**
*left turn to sideways lunge on the right foot; the stretched leg has the sole on ground, toe leaning forward – **maintain for 10 to 15 sec**
*the stretched leg turning, toe leaning upward (coxo-femur joint external rotation) – **maintain for 10 to 15 sec**
Repeated: 2 to 3 times each side



9

Initial position: sit, arms downwards

Action:

*right knee raised to the chest, hands on shanks: pelvis and thigh dorsal muscles stretched – **maintain for 10 to 15 sec**

*right ankle placed on the left thigh and knee pressed downwards by the right hand: thigh internal muscles stretched – **maintain for 10 to 15 sec**

*turn to sit on the left thigh, shank bending while bringing the leg closer to the pelvis with one hand, thigh anterior muscles stretched – **maintain for 10 to 15 sec**

Repeated: 2 to 3 times each side





10

Initial position: sit, forearms bent, elbows between knees

Action: knees pushed against the forearm resistance: thigh internal muscles tensed - **maintain for 8 to 10 sec**

Relaxation: 2 to 3 sec

Action: knees pushed sideways: thigh internal muscles stretched – **maintain for 8 to 10 sec**

Repeated: 2 to 3 times

12

Initial position: sit, arms downwards

Action: right leg placed on the opposite knee, the Achilles tendon stretched with the hands – **maintain: 8 to 10 sec**

Repeated: 2 to 3 times

11

Initial position: sit, legs separated

Action: trunk bending forward on each leg, back upright and stretched along the spine – **maintain for 8 to 10 sec**

Repeated: 2 to 3 times



Conclusions

- 🌐 A goalkeeper's physical exertion is different in comparison to that of field players. This aspect determines both the training particularization at a general level and the use of some complementary exercise sets that can be practised during the moments when a goalkeeper is not busy defending the goal.
- 🌐 The moments of interruption, waiting on the bench or needed for the goalkeeper's substitution must be taken advantage of so that training efficiency increases.
- 🌐 Individual exercises performed during these moments help to maintain the effort bio-motor parameters at an optimum level necessary for carrying out various activities.

Photos of the female goalkeeper
ILDIKO KEREEKES BARBU

Youth World Champion in 1995

80 games in the Romania national team

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