

Pendy Ball Exercises

Functional research on Pendyball by Ledragomma original “pezzi”[®] carried out by:

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On the basis of previously obtained information (from brochures and videos already available), on the functionality of PendyBall by Ledragomma original “pezzi”[®], we developed several specific exercises suited for the characteristic development of the centrifugal force that this tool can create.

These exercises are divided, based on individual needs, in postural exercises to strengthen the phasic muscles, and in functional-athletic exercises, which require a high component of general strength and motor control.

As stated above, these exercises improve the strength of the phasic muscles, i.e. “deep” muscles, which are very important in order to reduce the risk of joint problems caused by poor posture. Poor posture can be due to genetics in terms of abnormal bone growth, causing joint alignment problems, or caused by bad lifestyle habits.

Coxo-stability

Joints and muscles involved: coxofemoral (ball-and-socket joint) with the following main muscles: Tensor Fasciae Latae for abduction; Pectineus, Gracilis, and Adductor muscles for adduction; Iliopsoas muscle for antepulsion; Gluteal muscles for retropulsion.

Position: standing up, place the PendyBall by Ledragomma original “pezzi”[®] under your knee so it replaces your foot and acts as a fulcrum. The leg is then flexed and the knee of the flexed leg, positioned exactly on the vertical plane running to the floor through the diameter of the ball. The leg with the foot on the ground remains slightly bent at all times. This is easier to do by holding onto a wall for support and more difficult if you do not hold on to anything.

Execution of the exercise: create a rotational motion of the pendulum inside the ball, first in a 30°-45° direction, then with a greater pressure stop the pendulum and make the pendulum rotate in the opposite direction.

TYPE OF PENDYBALL BY LEDRAGOMMA ORIGINAL “PEZZI”[®]: both 2kg and 4 kg.



Knee-stability

Joints and muscles involved: femur-patella-tibia (difficult to classify) with the following main muscles: Intermediate and lateral vastus muscle, Gluteal muscles, Biceps femoris muscle, Semitendinosus and Semimembranosus muscle, Popliteus muscle.

Position: standing up, place the PendyBall by Ledragomma original "pezzi"® under your knee so it replaces your foot and acts as a fulcrum. The leg is then bent (maximum 90° and no more) and the sole of the foot should be placed exactly on the vertical plane running through the diameter to the floor. The leg with the foot on the ground should remain slightly bent at all times. This is easier to do by holding onto a wall for support and more difficult if you do not hold on to anything.

Execution of the exercise: create a rotational motion of the pendulum inside the ball, first in a 30"-45" direction, then with a greater pressure stop the pendulum and make the pendulum rotate in the opposite direction.

TYPE OF PENDYBALL BY LEDRAGOMMA ORIGINAL "PEZZI"®: 2 kg ball recommended.



Shoulder-stability

Joints and muscles involved: scapulohumeral (ball-and-socket joint) with the following main muscles: Supraspinatus, Infraspinatus, and Teres Minor muscles, Deltoid muscle, Pectoral muscle.

Position: in a sitting position or with the legs spread apart (to keep the pelvis lower) place the PendyBall by Ledragomma original "pezzi"® in front of you, then place a hand (or fist) on the vertical plane running through the diameter of the PendyBall by Ledragomma original "pezzi"® to the floor. Keep the arm of the hand resting on the ball outstretched by applying a certain pressure. In particular, with the legs apart, make sure to maintain a good spinal posture by contracting the core. Standing version.

Execution of the exercise: create a rotational motion of the pendulum inside the PendyBall by Ledragomma original "pezzi"®, first in a 30"-45" direction, then with a greater pressure stop the pendulum and make the pendulum rotate in the opposite direction.

TYPE OF PENDYBALL BY LEDRAGOMMA ORIGINAL "PEZZI"®: both 2kg and 4 kg.



Pelvic-stability 1

Joints and muscles involved: sacroiliac joint (arthrodia), lumbosacral region of the spine (arthrodial joints) with following main muscles: Pectineus, Gracilis, and Adductor muscles for adduction; Quadriceps; Pelvic muscles; abdominal wall.

Position: place the PendyBall by Ledragomma original "pezzi"® under the body in a standing position and squeeze it with the knees, keeping the legs slightly bent (with the possibility to change the working angle of the knee).

Execution of the exercise: create a rotational motion of the pendulum inside the PendyBall by Ledragomma original "pezzi"®, first in a 30"-45" direction, then with a greater pressure stop the pendulum and make the pendulum rotate in the opposite direction.

TYPE OF PENDYBALL BY LEDRAGOMMA ORIGINAL "PEZZI"®: both 2kg and 4 kg.



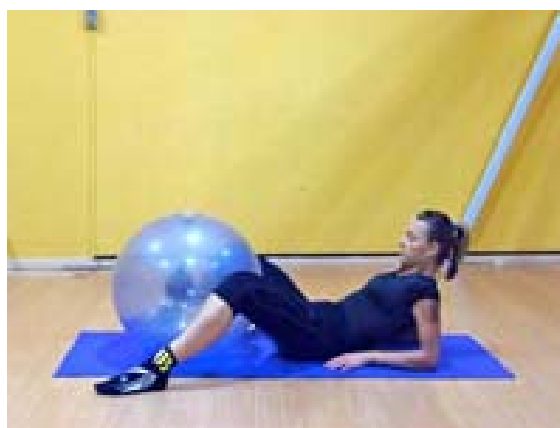
Pelvic-stability 2

Joints and muscles involved: sacroiliac joint (arthrodia), lumbosacral region of the spine (arthrodial joints) with following main muscles: Pectineus, Gracilis, and Adductor muscles for adduction; Pelvic muscles; abdominal wall.

Position: in a sitting position, place the PendyBall by Ledragomma original "pezzi"® in front of the body at a distance that allows you to hold and squeeze the ball with the legs (understood as part of the body). Keep the knee joint slightly flexed, the elbows resting on the floor in order to prevent excessive tension in the lumbar spine. The position obtained, half way between sitting up and lying down, makes it possible to do the exercise correctly.

Execution of the exercise: create a rotational motion of the pendulum inside the PendyBall by Ledragomma original "pezzi"®, first in a 30"-45" direction, then with a greater pressure stop the pendulum and make the pendulum rotate in the opposite direction.

TYPE OF PENDYBALL BY LEDRAGOMMA ORIGINAL "PEZZI"®: both 2kg and 4 kg.



Elbow-stability 1

Joints and muscles involved: humeroradial (condyloid joints), humeroulnar (angular ginglymus), radioulnar (lateral ginglymus) with the following main muscles: Triceps brachii muscle, Brachioradialis, Radial muscles.

Position: the PendyBall by Ledragomma original "pezzi"® must be placed in front, the person in a squatting position with the legs a shoulder width apart. The angle between the arm and forearm should be close to 90°, and not less. For greater action of the Radial muscle place the hand open with the palm resting on the PendyBall by Ledragomma original "pezzi"® exactly on the vertical plane running through the PendyBall by Ledragomma original "pezzi"® to the floor. Then apply slight pressure on the PendyBall by Ledragomma original "pezzi"®.

Execution of the exercise: create a rotational motion of the pendulum inside the PendyBall by Ledragomma original "pezzi"®, first in a 30"-45" direction, then with a greater pressure stop the pendulum and make the pendulum rotate in the opposite direction.

TYPE OF PENDYBALL BY LEDRAGOMMA ORIGINAL "PEZZI"®: 2 kg ball recommended.



Elbow-stability 2

Joints and muscles involved: humeroradial (condyloid joints), humeroulnar (angular ginglymus), radioulnar (lateral ginglymus) with the following main muscles: Triceps brachii muscle, Brachioradialis, Radial muscles.

Position: the PendyBall by Ledragomma original "pezzi"® must be placed in front, the person in a squatting position with the legs a shoulder width apart. The angle between the arm and forearm should be close to 90°, and not less. For greater action of the Brachioradial muscle, this time place the hand (better if in a closed fist), in a neutral position (hammer style) so that it rests on the PendyBall by Ledragomma original "pezzi"® exactly on the vertical plane running through the diameter of the PendyBall by Ledragomma original "pezzi"® to the floor. Then apply slight pressure on the PendyBall by Ledragomma original "pezzi"®.

Execution of the exercise: create a rotational motion of the pendulum inside the PendyBall by Ledragomma original "pezzi"®, first in a 30"-45" direction, then with a greater pressure stop the pendulum and make the pendulum rotate in the opposite direction.

TYPE OF PENDYBALL BY LEDRAGOMMA ORIGINAL "PEZZI"®: 2 kg ball recommended.

