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ACTIVITY CARE PLANS FOR SENIORS

FIRST EC2U SUMMER SCHOOL

SMART AGEING AND HEALTHY LIFE

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WILLIAMS METHOD

LOWER BACK PAIN MANAGEMENT METHOD

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The Williams program emphasizes the very important role of physical therapy using exercises for maximum flexion of the lumbar spine, in order to relax the muscles of the lumbar extensors, performing a lumbar decoupling. This method is performed with very good results in low back pain and lumbosacralgia (L4-L5, L5-S1, S1-S2).

The objectives of the method are to actively develop the abdominal muscles, the muscles of the buttocks and hamstrings, in parallel with the passive stretching of the antagonistic muscles: hip flexors and sacrospinal muscles.

In the acute period, positions of maintained lumbar flexion are recommended (see analgesic posture).Williams-type exercises are structured in 3 phases starting from the subacute stage of the disease.

WILLIAMS METHOD

PHASE 1

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1. The patient is lying on his back and will perform knee flexion while keeping his heels in contact with the bed.

2. The patient is lying on his back and will bend his knees while keeping his heels in contact with the bed, then bring one knee to his chest, trying to touch the knee with his forehead. The exercise will be performed alternately.

3. The patient is lying on his back and will bend his knees while keeping his heels in contact with the bed, then bring his knees to his chest, trying to touch his knees with his forehead.

4. The patient is lying on his back, hands on the back of his neck, and will flex his knees while keeping his heels in contact with the plane of the bed, pulling one knee to his chest, alternately. This exercise will also be performed by bringing the knees to the chest at the same time.

5. The patient is lying on his back with his knees bent at 90 °, the FOOT on the bed, will exhale AND AT THE SAME TIME WILL DO the contraction of the abdominal muscles by pushing the lower back towards the bed, lifting the sacrum.

6. The patient in the sitting position, with the knees abducted, will flex the lumbar spine, bringing the head between the knees, allowing the hands to reach under the chair; hold the position for 3-5 seconds and repeat the exercise. The purpose of the exercise is to increase the lumbar elasticity, the hamstrings and to increase the strength of the lower lumbar muscles.

WILLIAMS METHOD
PHASE 2

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1. The patient is lying on his back with the knees flexed at 90 °, the FOOT on the bed, will rotate the pelvis with the inclination of the lower limbs to the left / right (alternatively)

2. patient is lying on his back, knees extended, left heel over the opposite knee until the ground reaches the left leg. The exercise will be performed with both lower limbs - alternatively.

3. The patient lying on his back, with his knees bent at 90 °, will bring the right heel over the left knee and will perform the abduction of the right knee, with maximum external rotation. The exercise will also be performed in the reverse position.

4. The patient is lying on his back, with his knees extended, he will flex his thigh with his knee extended. The exercise will alternate both lower limbs.

5. The patient is standing with his hands resting on the back of a chair / GYM trellis, performing semi-flexions, keeping his back straight and his heels on the floor.

6. At this stage, the exercises AT THE GYM trellis will begin: The patient is hanging with his back to the trellis, he will flex his thigh on the pelvis

7. The patient is hanging with his back AT the GYM trellis, knees bent 90 °, will rotate the pelvis left / right

8. From hanging facing the GYM trellis, the patient will swing TO THE left / right THE LOWER limbs.

9. From hanging, the patient facing the GYM trellis, with the lower limbs supported on an upper step, will perform lumbar kyphosis.

WILLIAMS METHOD

PHASE 3

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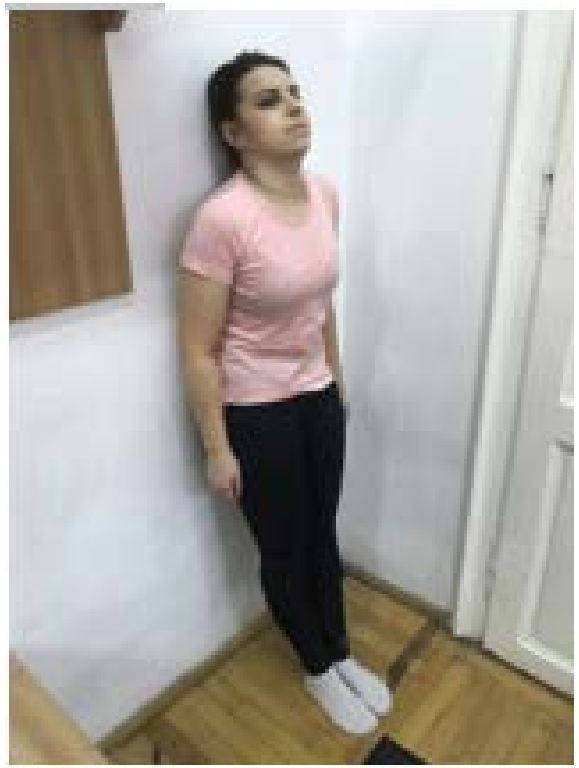
1. The patient is lying on his back with his knees bent, he will contract the abdominal muscles, pushing his lower back towards the bed and the sacrum tilted upwards. Gradually, the patient will perform this lumbar kyphosis, with the knees less and less bent, until he reaches the ground with them.

2. Pacientul se află în ortostatism, cu spatele lipit de perete şi membrele inferiore la 25-30 cm de perete, va aplica sacrumul şi lomba aplatizate pe perete şi treptat va trage calcaneele spre perete, menţinând contactul lombei cu peretele.



3. The patient in supine position will perform the “AIR bicycle" with the pelvis tilted forward.

MCKENZIE METHOD

LOWER BACK PAIN MANAGEMENT METHOD

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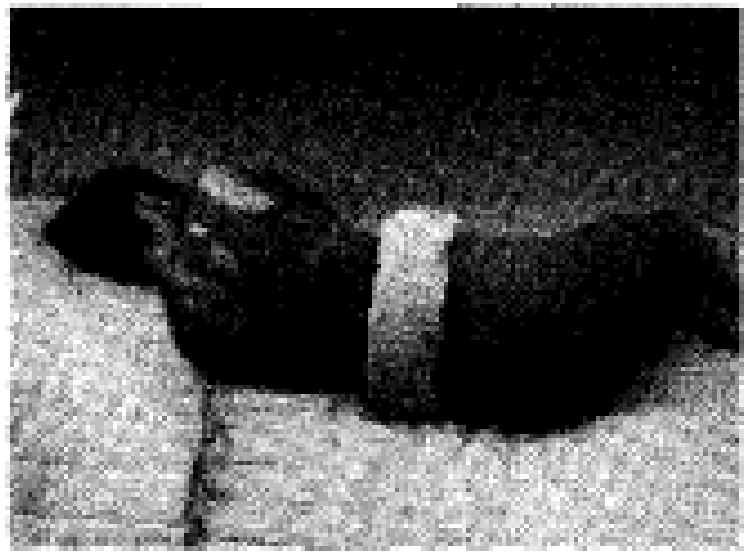
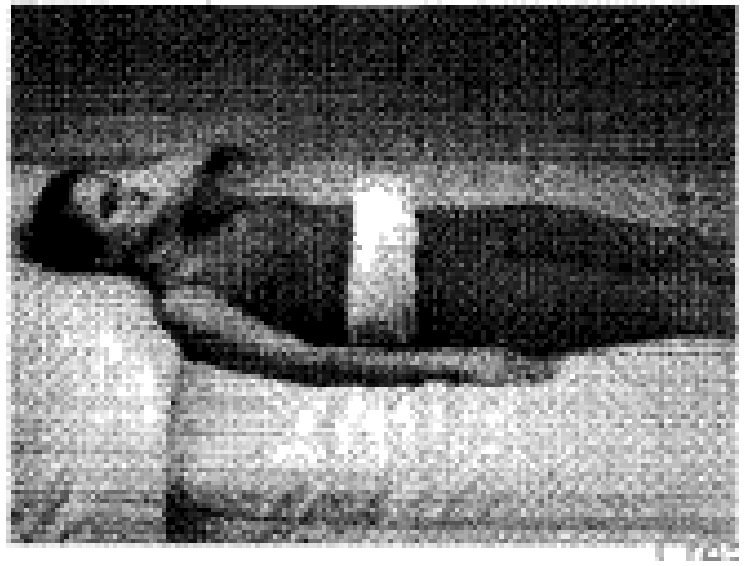
It consists IN a program of special exercises designed, individually for each patient, to locate and eliminate pain, both in chronic and acute cases.

Causes of pain

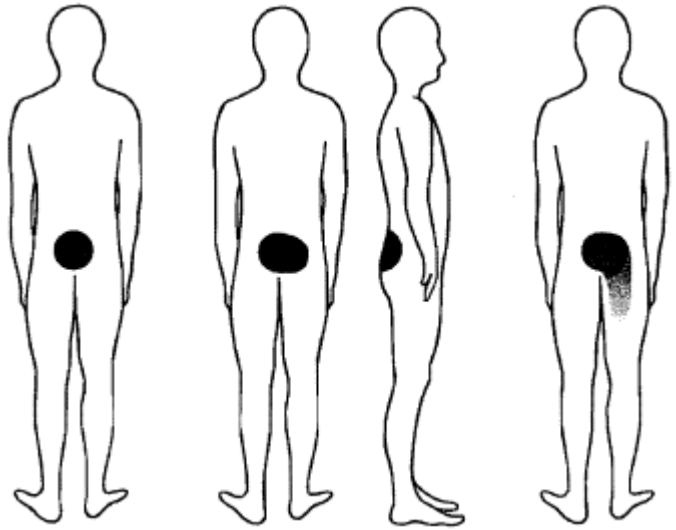
- Posture maintained incorrectly
- Sitting posture maintained incorrectly (with foot over leg, no lumbar support, on sofas, chairs too low)
- Posture during household chores (vacuuming, gathering things on the floor, etc.)
- Lifting certain objects of different weight
- Prolonged orthostatism in the wrong posture

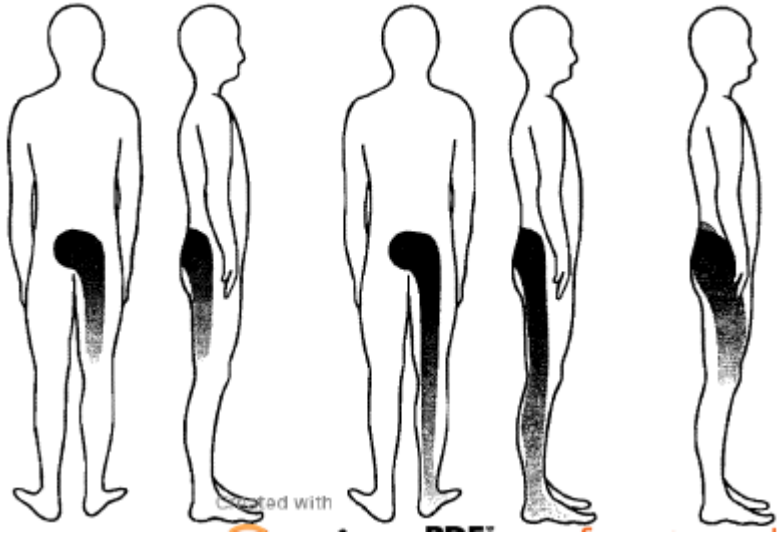
PACIENT LYING ON THE SIDE (fetal position) OR it is recommended TO LIE ON THE BACK with lumbar support or TO LIE ON THE SIDE with support at the waist angle





THE PAIN FELT





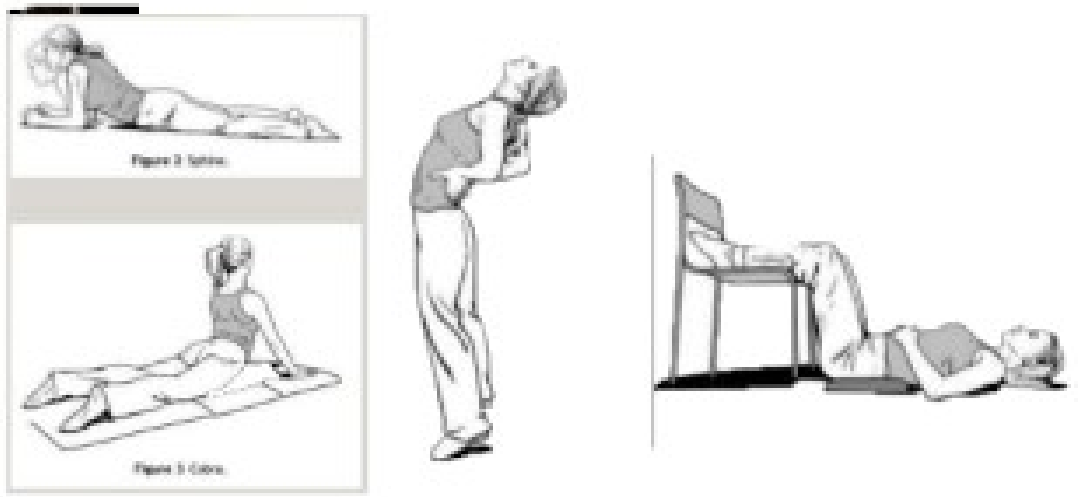
Treatment objectives:

reduction of pain and contracture;
recovery of functionality in the lumbar spine;
prevention of recurrent pain.

During treatment, the aim is to correct the position by neutralizing the symptoms, the patient avoiding as much as possible the activities or positions that increase the intradiscal pressure, such as bending the torso forward or exercises with torso flexion. AVOID bending the torso forward or trunk flexion exercises.

To keep the spine in a lordotic position throughout the day, McKenzie recommends the use of rollers FOR lumbar SUPPORT or special chairs.

The McKenzie program is a complex of exercises, effective in both chronic and acute pain. This program uses a series of progressive exercises, designed to locate and ultimately eliminate the patient's pain.



Typical of the McKenzie program is the correction of any lateral displacement and passive extension exercises, which favor the movement of the nucleus pulposus towards the central region of the disc.

In this case the suffering is determined by the AFffectation:

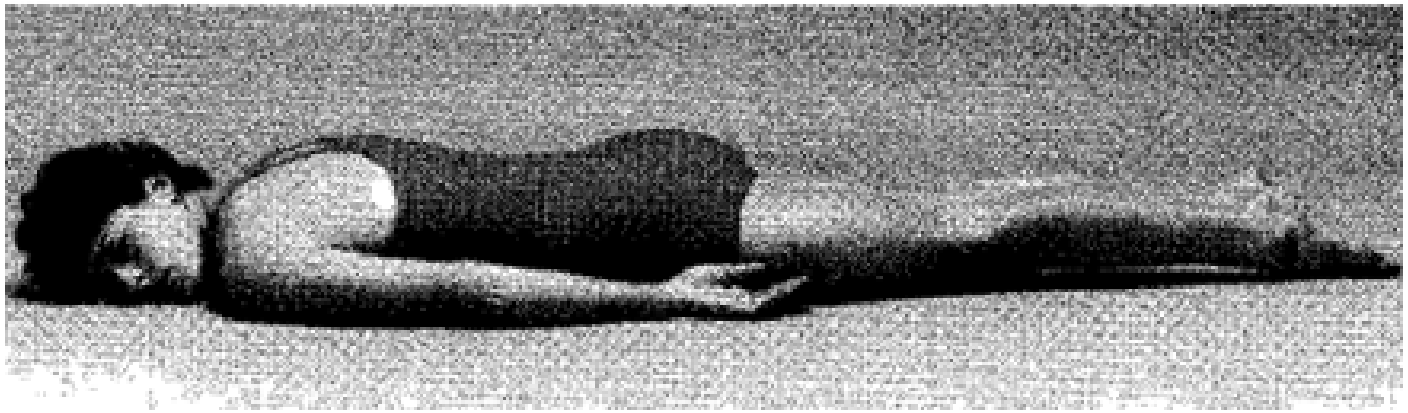
muscle
ligaments
fascia
interapophyseal joints
intervertebral disc.

The treatment of dysfunctions caused by postural errors that cause pain includes:
correcting the patient's position - the pain should subside within 24 hours; correct the posture after 24 hours;the physiotherapist helps the patient to perform the stretching, which must be continued by the patient

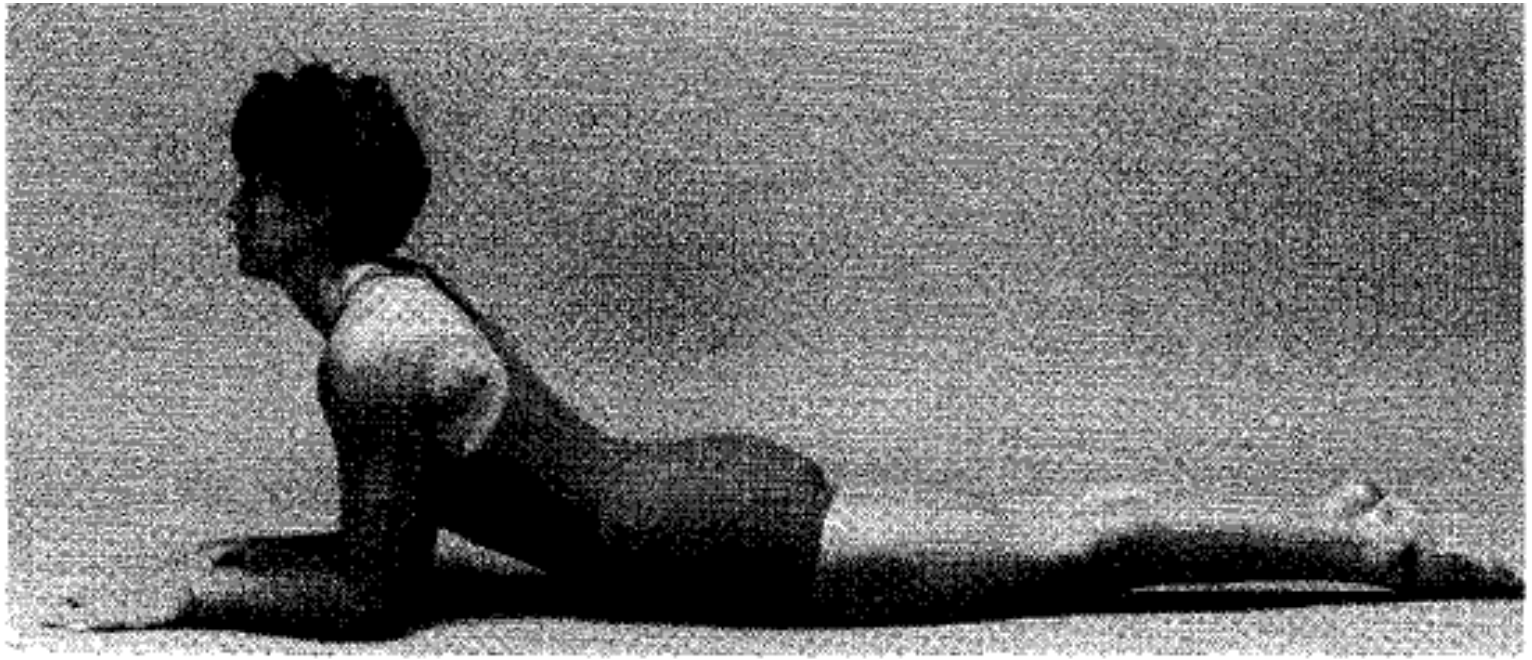
McKenzie exercises use gravity to put the intervertebral discs back in place at birth. Maximum relaxation is needed to allow the intervertebral discs to move.

McKenzie exercises can be divided into: active passive (stretches) (when the movements are performed using the muscles). Passive exercises are always performed first.

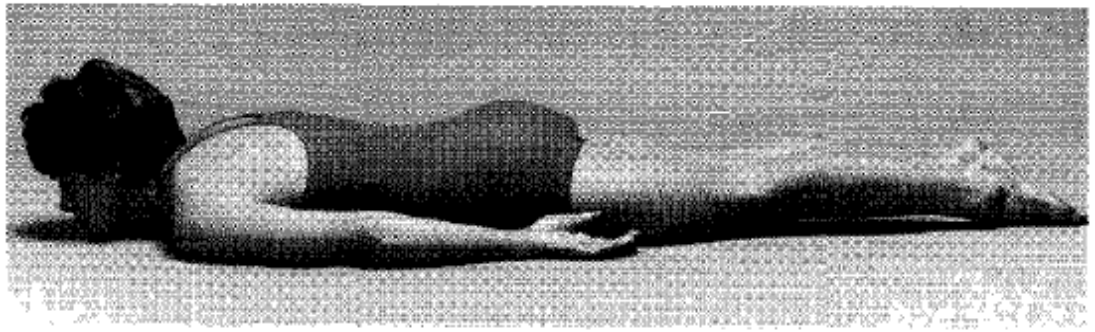
Position 1

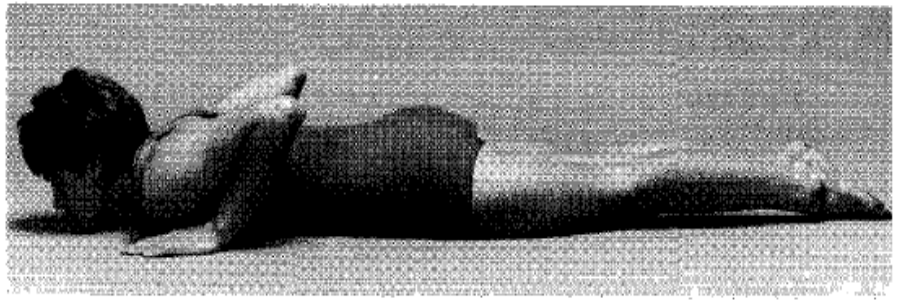


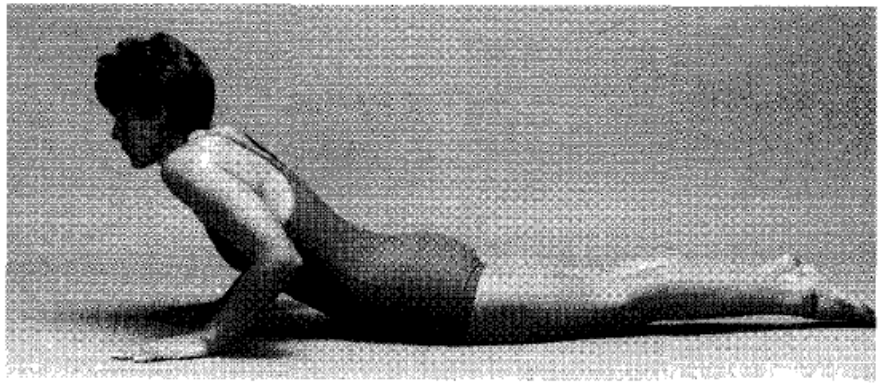
Position 2

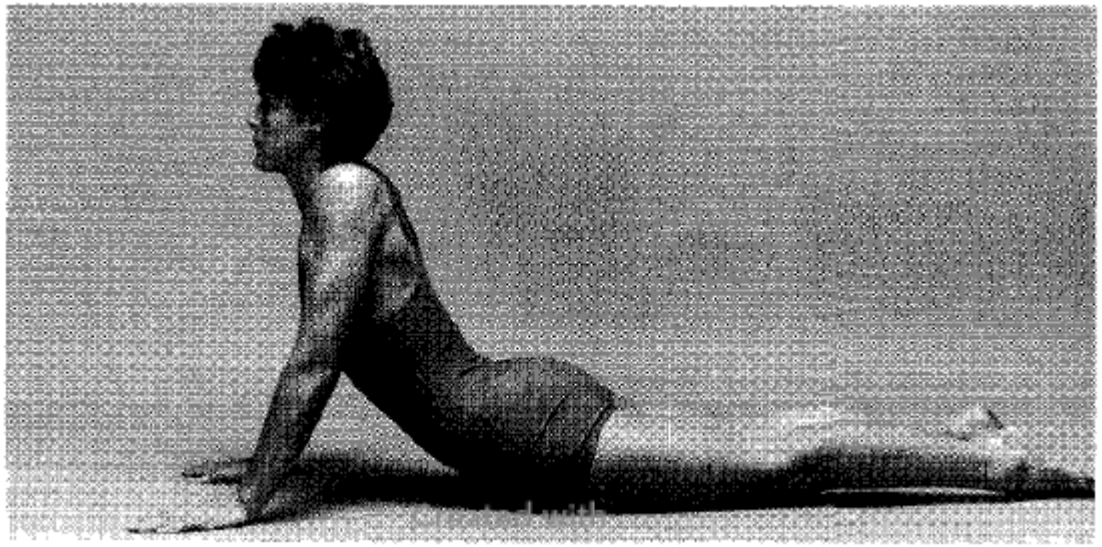


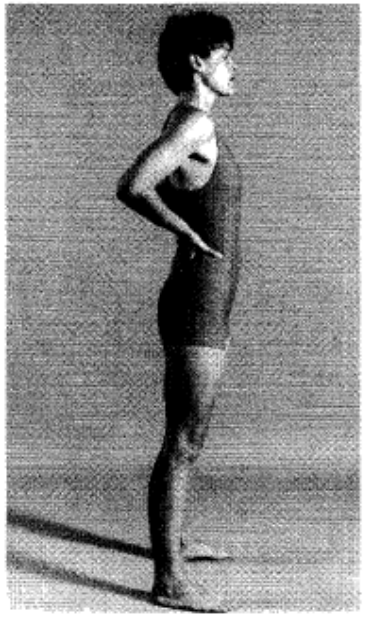
Position 3

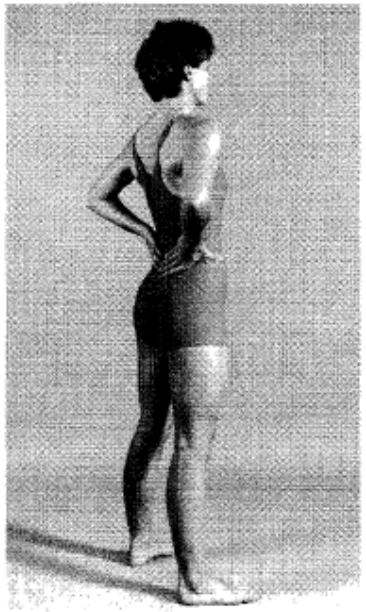




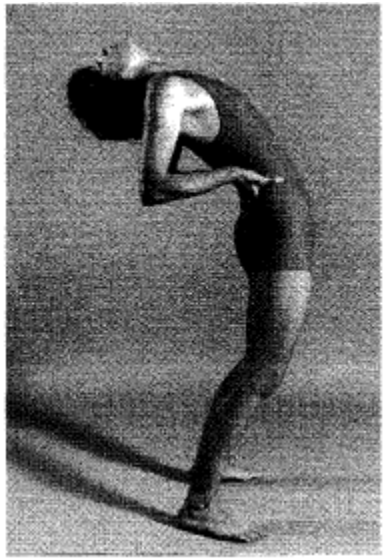




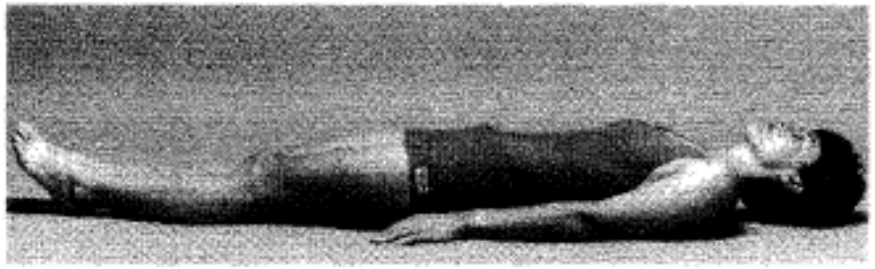


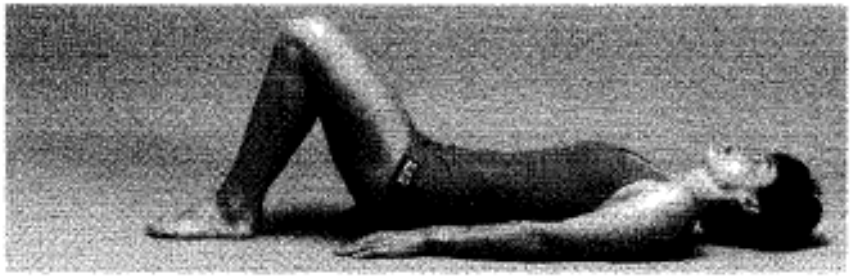


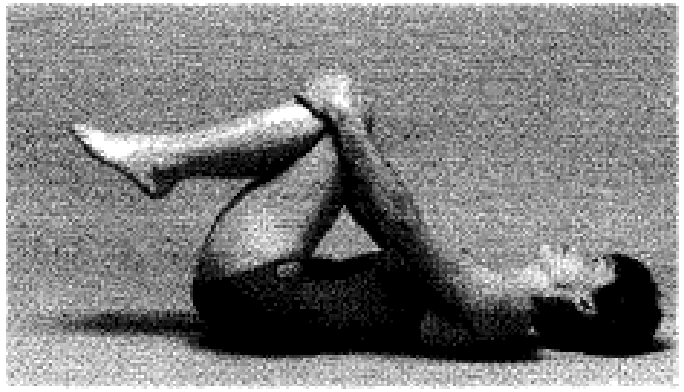
Position 4

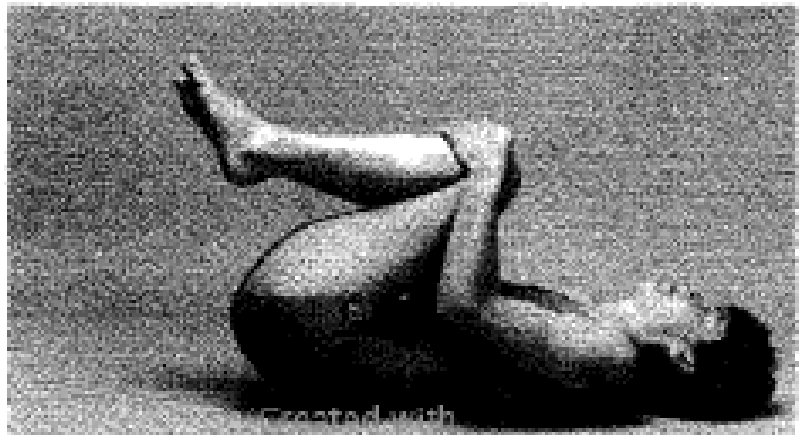


Position 5

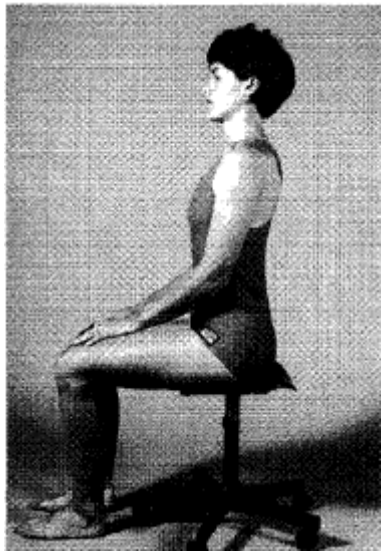




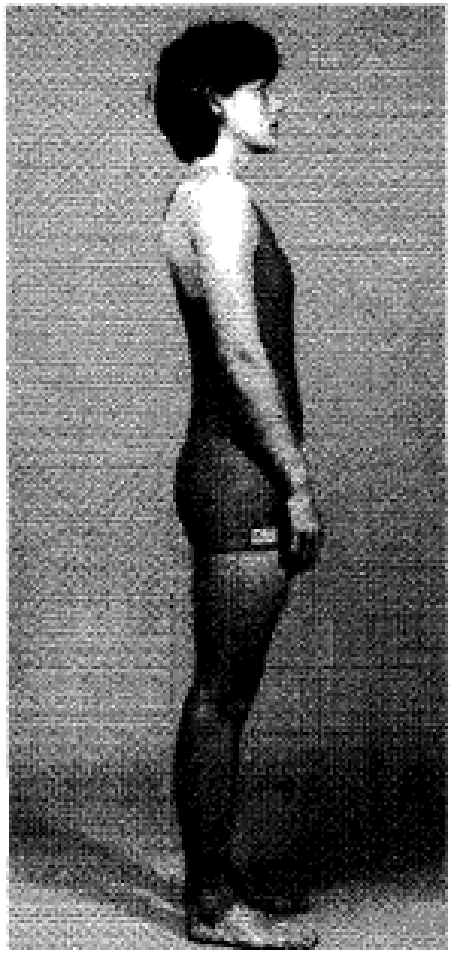


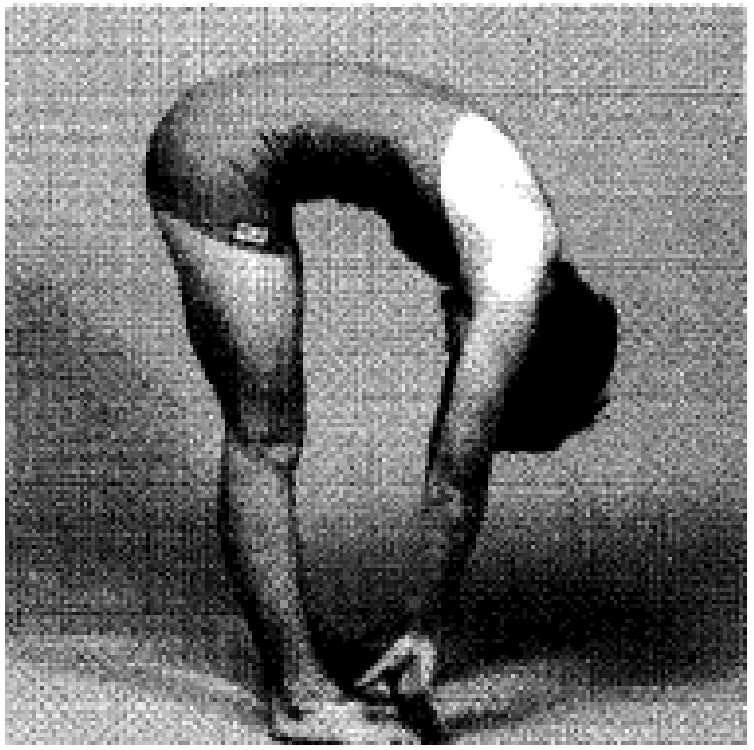


Position 6



Position 7





How use the exercises

In acute syndrome:

- Position 1
- Position 2
- Position 3

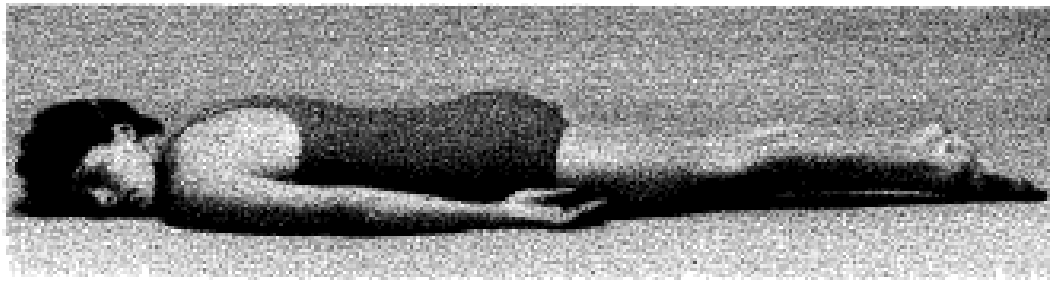
When the pain is reduced

- Position 5 followed by Position 3
- Position 6
- Position 7

When the pacient doesn't feel pain or stiffness

- Position 3
- Position 4
- Position 7
- It is recommended to use a lumbar roll

When we don’t have a positive response from the exercises explained above



The pacient will do a side bend on the opposite side of the pain

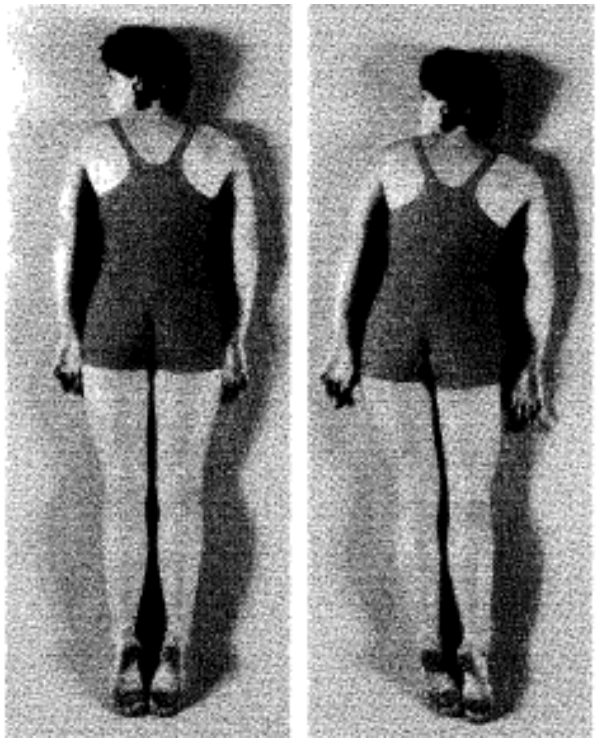


Fig. 5.7 Step 3. With hips off centre, lean on elbows.

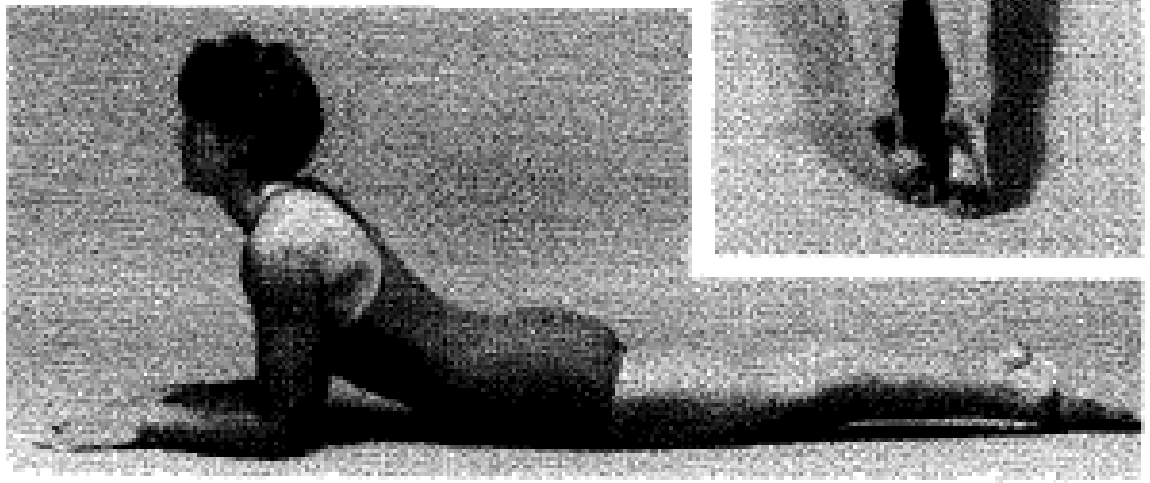
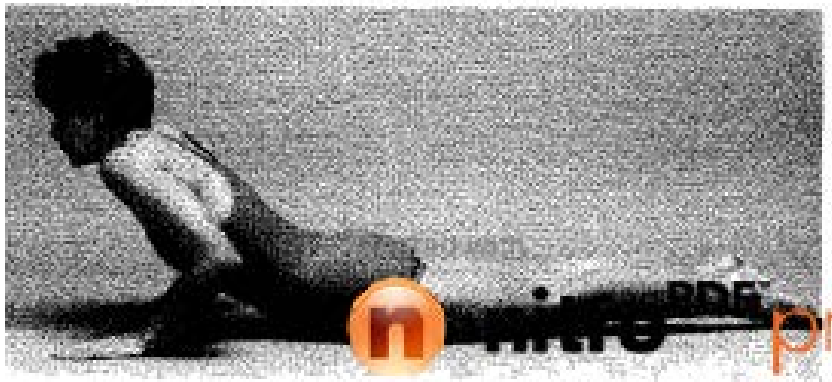
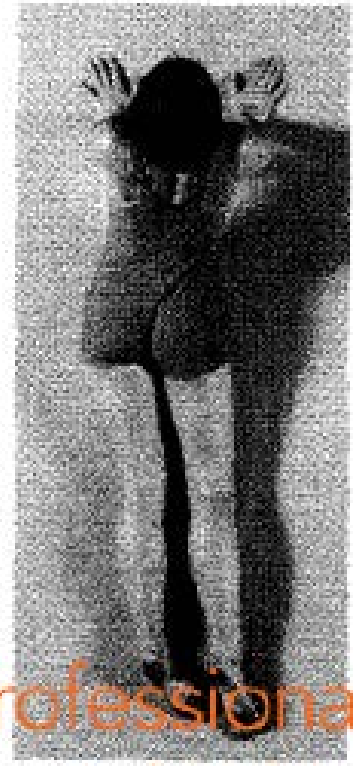
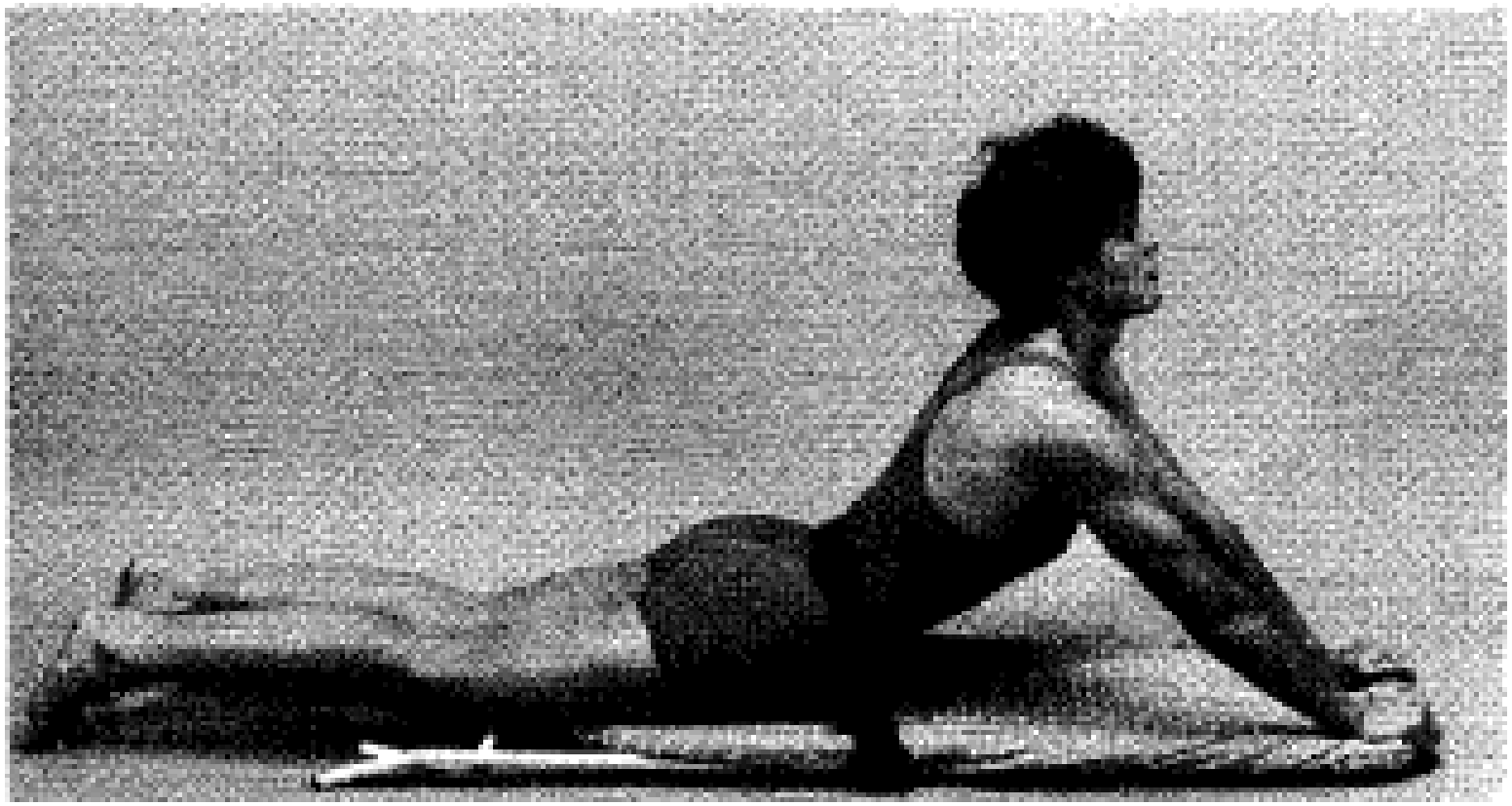


Fig. 5.8 Step 4. With hips off centre, you are ready to commence Exercise 3.







Other Active and passive exercises can use:

- Gym sticks
- Balls
- Weights
- Elastic bands
- Balance boards
- Medicinal ball
- Canadian board (prehension rehabilitation)

Thank you !

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