



WILLIAMS FLEXION EXERCISES (Williams PC: Lesions of the lumbosacral spine: chronic traumatic (postural) destruction of the intervertebral disc, JBJS-A 29: 690-703, 1937)

- 1) Pelvic Tilt: On back with knees bent & feet flat on floor. The patient pushes the small of the back against the floor without pushing down on the legs. Hold for 5-10 seconds and repeat up to 15 times per day.
- 2) Single Knee to Chest: On back with knees bent and feet flat on the floor. Patient passively pulls the right knee to their shoulder and holds for 10 seconds and repeat up to 15 times per day for each leg.
- 3) Double Knee to Chest: On back with knees bent and feet flat on the floor. Patient passively pulls both knees to their shoulders and holds for 10 second and repeats up to 15 times per day.
- 4) Partial sit-up: Patient performs the pelvic tilt and then curls the head and shoulder off the floor and holds for 5 seconds, slowly. Repeat up to 15 times.
- 5) Hamstring Stretch: Patient sits with the knees extended and the toes directed to the ceiling. The trunk is actively and passively stretched over the legs with the arms stretched over the legs and the eyes looking forward to the toes.
- 6) Hip Flexor Stretch: Patient places one foot in the front of the other with the left in the front with the knee flexed and directed to the ipsilateral axilla. The right knee is held in extension behind the torso. This position is held for 5 seconds and repeated up to 10 times per day. The legs are switched and the process is repeated.
- 7) Squat: Patient stands with both feet parallel to each other, approximately shoulder width apart. Patient views directly ahead with head up and feet flat on the floor. The patient then lowers into a squat and holds this position for 5 seconds. This is repeated up to 10 times per day.

Recommended reading: www.backtrainer.com