Most motion within the spinal column occurs in the lumbar and cervical regions. The “good morning” exercise provides a good way to specifically condition lumbar-thoracic flexion and extension of the back. The barbell is placed on the upper back in a slightly higher position than when doing a squat. One should stand erect with the feet about shoulder width apart. The lifter slowly bends forward until parallel to the floor, pauses and then returns to the erect position.

Further analysis of this exercise indicates that the contralateral muscles for lumbar-thoracic flexion are located posterior to the vertebrae. These are the muscles in the erector spinae muscle group. When the lumbar-thoracic flexion is with gravity plus weights the erector spinae become the muscles most involved by contracting eccentrically to control the extent and speed of motion. Again bend over slowly and do not overload with excessive weight in this exercise. In this reversal of function the abdominals become the contralateral muscles as one flexes or bends over.

Powerful extension of the lumbar-thoracic spine is an important motion within many sport skills. Extension of the lumbar-thoracic spine against resistance is the result of bilateral eccentric muscular contraction by the pairs of muscle within the erector spinae muscle group. In order to have spinal extension without any rotation, these muscles must contract equally and bilaterally. Each muscle of the erector spinae group when examined individually is not very large. But, collectively the group is large and has considerable strength potential. The deep posterior spinal group and both semispinalis thoracis muscles contribute to the contractile force for extension, but are not prime movers.

The erector spinae help to guide the return to the erect position. Rotary and lateral flexion capabilities are eliminated. The internal and external oblique muscles on both sides do in fact contribute to the guiding force during the extension movement.

The “good morning” exercise is a very simple movement which has great impact in lower back conditioning. One should not use excessive weight and be very strict in the execution of this motion.

The movements of the spinal column have also been researched using electromyograph analysis (EMG). For example, forward flexion of the spine show muscle activity until flexion becomes extreme. At this point muscle EMG’s become silent and the ligamentous structures assume the load. Therefore, during heavy lifting with the back alone, as in the case of the “good morning” exercise, the initial stages show the erector spinae to be relaxed. This confirms the dangers of overloading the ligaments and joints when lifting with the back alone and not the muscles of the lower limbs. (2) So, remember this exercise can be effective and help your athletes without using heavy weights to perform the exercise.

Selected References