

Table 1) Combination training protocol including tensile and strength training

First Week: Tensile motion of the upper part of the trapezius muscle

The patient sits in a steady position on his wheelchair, putting the wheelchair with one hand, moving his other hand in the direction of his body and trying to touch the ear on the other side. During this tensile movement, the patient should avoid the head turning (this move applies equally to the other shoulder).

Second Week: Tensile movement of Pectoralis muscle

The patient is placed in the appropriate position on the wheelchair between the door frames. He should arrange his arm in the position that he has an elbow less than 90 degrees on the door frame, and with the other hand, he should slowly turn the wheelchair toward the other side of the door frame (this move applies equally to the other shoulder).

Third Week: tensile motion of the long head of biceps

The patient is placed on his wheelchair between the door frames. He moves his arm out of his body and places his forearms on the door frame and slowly rotates the wheelchair to the other side of the frame. It is important for the patient to maintain pressure and contraction down the stretch in his scapular area (this move applies equally to other shoulder)

Fourth Week: Tensile movement of the posterior muscle

The patient should lie flat on a flat surface and place a pillow under a scapular. With one hand, he takes his other elbow and pulls his elbow to other side. The patient must keep his scapular intact during stretching and prevent it from being removed from the pillow surface (This move applies equally to the other shoulder).

Fifth Week: Movement of the middle and lower parts of the trapezius muscle

The patient sits in the proper position on his wheelchair and slowly moves his arms outside his seat. Then, he presses his shoulder down and toward each other.

Sixth Week: Strength movement of the middle and lower parts of the trapezius muscle

The patient lies on the bed or a flat surface and shrinks his arms approximately 45 degrees, and he presses his shoulders to the flat surface so that the shoulders approach each other as close as possible and while doing so, he presses his arms to the surface lying on it.

Seventh Week: Strengthening movement of serratus anterior

The patient attaches the belt to the back of his wheelchair. Then he takes the belt with his hands and push his hands up and forward.

Eighth Week: Strengthening movement of outer side of shoulder

The patient sits in a comfortable position on his wheelchair and place a towel between the trunk and each of his arms. While holding the elbow joint at 90 degree, he holds a stretching belt in his hands, pulling his arms apart and pushing his shoulder down and toward each other.

Table 2) The mean demographic characteristics of the subjects in two groups (n=10 in each group)

	Control Group	Experimental Group
Age (Year)	50.20±4.32	52.20±7.66
Weight (Kilogram)	78.00±11.11	71.00±11.04
Height (Centimeter)	174.80±7.46	175.40±6.18

Table 3) Comparison of pain and shoulder function mean scores in the experimental and control groups
(n=10 in each group)

Variables	Control Group	Experimental Group	F Value	Significance Level
Shoulder Pain Level				
Pretest	81.40±13.83	69.00±33.20		
Posttest	66.70±21.27	40.00±26.28	6.79	0.03
Significance Level	0.06	0.001		
Function of the Shoulder				
Pretest	52.96±21.71	51.88±8.27		
Posttest	61.2±11.45	75.02±7.53	10.8873	0.0013
Significance Level	0.09	0.015		