

APPLYING THERAPEUTIC ADVOCACY EXERCISES ON THE TREATMENT OF CERVICAL SPONDYLOSIS FOR OFFICE WORKERS AT BAC NINH SPORT UNIVERSITY

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Abstract:

Applying therapeutic advocacy exercises combines with massage, acupuncture and spinal manipulation methods, the project coordinated in the treatment of cervical spondylosis for office workers at Bac Ninh Sports University.

Keywords: Manual treatment, massage, acupuncture, spinal impact, cervical spondylosis.

INTRODUCTION

Osteoarthritis (also called rheumatoid arthritis) is a chronic disease of the joints and spine, with symptoms of pain and deformity, without signs of inflammation. The underlying lesion of the disease is degenerative conditions of the articular cartilage and disc (in the spine), changes in the subarticular cartilage and synovial membrane. The main cause of the disease is the aging process and the state of prolonged pressure overload of articular cartilage (and disc).

Cervical spondylosis is a common disease among office workers with symptoms such as soreness, stiff neck, shoulder and neck. The pain may spread to the ears, temples, or shoulders, arms. Some cases may be accompanied with muscle spasms, numbness in the arms, forearms, fingers, or even worse situation like muscle weakness, muscle atrophy. There are many methods of treatment, but nowadays, non-drug treatments are increasingly being selected by doctors and patients, among which therapeutic advocacy exercises and acupuncture massage are the most commonly used treatments. However, in fact, the use of treatments depends on the patient's medical condition and practical conditions at the facility. Therefore, overcoming the condition of cervical vertebra degeneration for office workers at Bac Ninh Sports University by doing therapeutic advocacy exercises is very urgent and practical.

RESEARCH METHODS

The research process uses the following methods: Methods of synthesizing and analyzing documents; method of interview, seminar; medical examination method; Pedagogical experiment and statistical mathematical method. Diagnosis and application effectiveness are evaluated on 2 criterias: pain sensation and limited range of motion with 4 levels.

Pain Assessment Perception Scale (VAS):

Evaluated by: Movement range of patient's cervical spine:

Unrestricted, limited restraint: Angle of movement for bending, tilting the neck > 30 degrees, tilting right, left, turning left, right > 40 degrees.

Moderate: If the angle of movement is bowed, neck up > 20 degrees - 30 degrees. Tilting right, left, turn left, right > 20 degrees - 39 degrees.

Very limited: if the angle of movement is bowed, the neck up < 20 degrees, right tilt, left turn left, right < 20 degrees.

RESULTS AND DISCUSSION

1. The reality of the prevalence of cervical vertebra of office workers at Bac Ninh Sports University

Through interviews with 120 office workers at Bac Ninh Sports University, the topic has identified the reality of cervical spondylosis mainly appearing in middle and elderly age,

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against the force of the hands, keeping the head in an upright position.

Step 4: Perform: Keep the posture straight. Place one hand on the head, above the ear, creating a force to tilt head to the right. At the same time, the head and neck also create a balanced force against the force of the hands, keeping the head in an upright position.

Each position should be done for 10 seconds, until the neck joint feels tired, slowly lower your hand and stop. Perform each movement about 5 times.

Exercise 4:

Preparing posture: Stand or sit straight, eyes straight ahead.

Step 1: Tilt the head to the right to shoulder. Place your right hand on the opposite end and gently pull the head with your hand so that the left neck muscles feel tense.

Step 2: Perform: Tilt the head to the left shoulder. Place your left hand on the opposite end of the head and gently pull it down so that the right neck muscles feel tense.

Hold for 30 seconds on each side, repeating 3 times.

Exercise 5:

Preparing posture: Stand or sit straight, eyes straight ahead.

Step 1: Press 2 shoulders to face each other, tilt your neck up, hold for 5 seconds to relax and repeat the movements 10 times.

Office workers or mobile users often have a forward-leaning position that causes the shoulder and neck to be humpbacked. This exercise helps improve spinal posture, strengthen shoulder muscles.

Exercise 6:

Prepare position: Stand or sit.

Step 1: Slowly turn the shoulder blades forward, up, back and down.

Step 2: Slowly turn the shoulder blades back, up, forward, down.

While doing this exercise, you may feel tension in the shoulder blades.

Exercise 7:

Posture: Lie face down, head on a towel or thin pillow.

Step 1: 2 hands reach forward, fingers

pointing up, hold this position for 5 seconds. Continue to perform 10 times.

Step 2: Maintain the preparation position, extend 2 shoulders, guide the arms on both sides to form a V shape. Lift the shoulders and arms up, fingers pointing up. Hold this position for 5 seconds and repeat 10 times.

Step 3: Prepare with prone position. Put your arms straight to the sides, lift your arms up, fingers up. Continue holding for 10 seconds and repeat 10 times.

Step 4: Move your hands along your body, lifting your arms and chest, hold for 5 seconds and repeat 10 times.

2.2. Developing a treatment process

Based on the results of the selection of therapeutic exercises, on the basis of theory and practice, the process of implementing therapeutic exercises is conducted as follow:

Motor therapeutic exercises consists of 7 exercises and 18 movements selected by the topic of introduction for patients and for mature practicing patients, requiring to sit in proper posture when working and 60 - 90 minutes after work. the patient will perform the exercises according to the previously introduced exercises in 5 minutes. 4 training sessions a day at least and 5 minutes each.

3. Evaluating the effectiveness of applying therapeutic exercises for office workers at Bac Ninh Sports University

The project conducted the control treatment on 30 cadres suffering from the neck and neck pain syndrome with different degrees from level 2 or higher. The beginning of treatment is from May 1, 2017 to June 30, 2017. The thesis used 02 criterias to evaluate: Pain Assessment Scale according to the patient's perception (VAS) and the range of neck and shoulders vertebrae with 04 level gradually increase. The effective application of empirical exercise therapy for shoulder and neck pain before and after experiments is presented in Table 1.

The results of Table 1 show that, both criterias for assessing cervical spondylosis after combining treatment decreased compared to before the experiment at different levels, which proves that the manual treatment applied to

Table 1. Results of applying therapeutic exercises to treat neck and neck pain syndrome for office workers at Bac Ninh Sports University before and after the experiment

Degree evaluation	Evaluation criteria	Comparative results						
		Before	After experiment					
			Level 1	%	level 2	%	Level 3	%
Level 2	Pain Assessment Perception Scale (VAS)	18	16	88.9	2	11.1	-	-
	Movement range of neck and shoulder joints	22	19	86.4	3	13.6	-	-
Level 3	Pain Assessment Perception Scale (VAS)	9	7	77.8	2	22.2	-	-
	Test of movement range of neck and shoulder joints	7	6	85.7	1	14.3	-	-
Level 4	Pain Assessment Perception Scale (VAS)	3	-	-	2	66.7	1	33.3
	Test of Movement range of neck and shoulder joints	1	-	-	-	-	1	100.00

research subjects has been effective. The specific results achieved in each criteria are as follows:

About pain sensation:

Level 4: 3 people before experiment, after the experiment, 1 person moved to level 3 (33.3%) and 02 people moved back to level 2 (66.7%).

Level 3: Before the experiment, there were 9 people, 2 people moved back to level 2 (14.3%) and 07 people moved to level 1 (75.7%).

Level 2: Before the experiment, there were 18 people, after the experiment, there were only 2 people (13.6%), 16 people specialized in level 1 (86.4%).

About limited range of motion:

Level 4: Before the experiment, there was 1 person, after the experiment, it was transferred to level 3 (100%).

Level 3: Before the experiment, there were 7 people, 1 person moved back to level 2 (11%) and 06 people moved to level 1 (89%) after the experiment.

Level 2: Before the experiment, there were 22 people, after the experiment, there were only 3 people (20%); 19 people moved to level 1 (80%).

Overall, after experiment, the 18 cases got better, accounting for 90%, the number of non-remission was only 02, accounting for 10%.

CONCLUSION

1. Determining the reality of cervical vertebra degeneration in office staff of Bac Ninh

University of Sports and Physical Education: cervical spondylosis mainly occurs in middle and elderly age, specifically: Age over 55 - 62 100% of women shows signs of cervical spondylosis; 25 -34 years old, male 50%, female 52.9%; 35 - 44 years old, male 62.5%, female 57.9%.

2. The project has selected 7 exercises with 18 movements for the treatment of cervical spondylosis for office workers of Bac Ninh University of Sports and Physical Education. The results after experiment show a significant reduction in the number and level compared to reality before the experiment.

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(Received 4/10/2019, Reviewed 15/10/2019

Accepted 25/11/2019)