목뼈의 바깥쪽 굽힘과 회전

신성윤* · 이현창**

*군산대학교

**원광대학교

Neck Bone's Lateral Flexion and Rotation

Seong-Yoon Shin* · Hyun-Chang Lee**

*Kunsan National University

**Wonkwang University

E-mail : s3397220@kunsan.ac.kr, hclglory@wku.ac.kr

요 약

본 논문에서는 인체의 목뼈 부문의 움직임을 다루도록 한다. 특히, 목뼈의 가쪽 굽힘과 돌림에 대한 각도를 측정한다. 측정한 값이 정상수치를 벗어나거나 통증을 동반하면 이상이 있는 것으로 간주하여 치료법을 제시한다.

ABSTRACT

This paper deals with the movement of the human neck bone. The neck bone is also called a cervical spine. Measure the angle of lateral flexion and rotation of the neck bone. If the measured value deviates from the normal value or is accompanied by pain, it is considered that there is an abnormality and the treatment method is suggested.

키워드

목뼈{Neck Bone}, 가쪽 굽힘(Lateral Flexion), 돌림(Rotation), 치료법(treatment)

Ⅰ. 서 론

A forward head posture occurs more frequently in white-collar workers and students sitting at the desk for a long time. Axial rotation is essential for everyday life without neck pain. Currently, there is a lack of research on neck rotation.

[1] is to investigate the effects of visual feedback on the neck rotation angle, lateral flexion angle, lateral flexion movement onset time, and neck muscle activity in adults with anterior head posture.

Ⅱ. 목뼈의 가쪽굽힘과 회전 및 치료

The rotation of the neck bone is rotated to the left and right axes as shown in Fig. 2. Here, the angle is 60° ~ 90°. Also, be careful that the jaw does not touch the shoulder line. In the neck bone, the lateral flexion and rotation occur together but in different directions. Fig. 3 shows the rotation of the neck as seen above.

In other words, move the ear towards the shoulder direction. The normal range of joint movement is 20° ~ 45° to the right and left. It is possible to compare the movements of each of the stages by promoting the transverse processes when moving. Precautions must be taken not to move the shoulder towards the ear at this time.

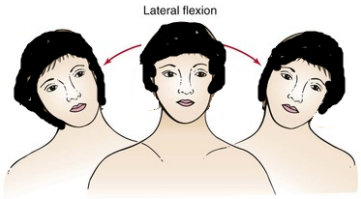

Fig. 2. Lateral Flexion

The rotation of the neck bone is rotated to the left and right axes as shown in Fig. 3. Here, the angle is 40° ~ 90°. Also, be careful that the jaw does not touch the shoulder line. In the neck bone, the lateral flexion and rotation occur together but in different directions. Fig. 4 shows the rotation of the neck as seen above.

Fig. 3. Rotation

Treatment methods for the abnormality in the lateral flexion and rotation of neck bone include cervical joint mobilization, muscle stretching, traction & compress, and gliding, etc.

III. 실험

Experiments were conducted on subjects of 50 people in their fifties. The experimental results are shown in Table 1. The lateral flexion problem is a person with a problem in the lateral flexion of the neck bone. In other words, the angle of the lateral flexion is less than 20 ° to 45 °, or it causes pain. Rotation problem is a person with a problem of rotation of the neck bone. That is, the angle is less than 40 ° to 90 ° or causes pain. Both problems have both lateral flexion and rotation problems.

Table 1. Experimental Results

Total no. of persons : 50

Categories	Lateral flexion problem		Rotation problem		Both problems	
	Left	Right	Left	Right	Left	Right
Before treatment (No. of persons)	6	7	5	5	1	3
After treatment (No. of persons)	2	3	3	3	0	1

IV. 결 론

Cervical spine is the section between the cranium and thoracic vertebrae among the vertebrae and is the bone structure that forms the neck section of the body. It supports the body and maintains the balance through the ligaments and muscles from the cranium to backbone. In addition, it has the function of protecting the spinal cord and enabling the movement of the spine.

Acknowledgement

"This research is partially supported by Institute of Information and Telecommunication Technology of KNU"

참고문헌

[1] No-Yul Yang, Jae-Seop Oh, "Effects of the Visual Biofeedback on the Movement Patterns of the Neck Lateral Flexion and Muscle Activation of Sternocleidomastoid during Neck Rotation in Adults with Forward Head Posture," J Korean Soc Phys Med, 9(4) (2014), 425-432