A Clinical Study on the Physiotherapy of Congenital Muscular Torticollis

Lee Donggeol, PT* · Park Kyeongsoon, PT
*Dept. of Physical Therapy, Chungnam National University Hospital

Abstract

연구목적: 본 연구의 목적인 선천성 사경을 가진 22명의 유아에 대한 임상적 양상과 물리치료 만족도 및 사경의 요인을 알아보는 것이다.

연구방법: 설문지를 통해 유아의 성별과 연령분포, 사경의 요인, 사경의 관리, 사경의 물리치료를 조사하였다.

연구결과:
1. 환자의 성별 및 연령분포는 남자아이가 9명(41%), 여자아이가 13(59%)이었고, 연령분포는 1-4개월이 5명(22.7%), 5-8개월이 6명(27.3%), 9-12개월이 4명(18.2%), 그리고 1년 이상은 7명(31.8%)이었다.
2. 사경의 정도는 경도가 3명(13.6%), 중등도 3명(13.6%), 중증 16명(72.8%)이었고, 사경의 분만요인으로 정상분만 12명(54.5%), 재왕절개분만 8명(36.4%), 그리고 둔위분만 2명(9.1%)으로 나타났다. 산모의 건강상태에 따른 요인은 매우 양호 7명(31.9%), 얇호 11명(50%), 약함 3명(13.6%), 그리고 매우 약함 1명(4.5%)이었다. 사경의 요인으로 분석된 가족력, 임신, 분만 사이에는 특별한 관련성은 없었다.
3. 사경 환자가 물리치료를 받는 횟수는 매일치료 9명(40.9%), 일주일에 2~3회 12명(54.5%)이었고 물리치료에 대한 만족도는 매우 우수 4명(18.2%), 우수 15명(68.2%), 보통 3명(13.6%)로 나타났다.

결론: 이러한 결과를 통해 물리치료가 선천성 사경에 매우 효과적이었다.

Key words: 선천성 사경, 물리치료

*Corresponding author:
Lee Donggeol, sopist01@hanmail.net, 011-9484-0937

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I. Introduction

Torticollis was first defined by Tubby. Torticollis is derived from Latin words, which means “twisted neck” Namely, torticollis is the state of having a twisted neck and the functional meaning is that the head is closed to the affected side shoulder and the chin is tilted opposite side due to the rotation and flexion deformation of the neck. Congenital muscular torticollis is usually discovered by the parents at the beginning of birth and it is the third most common congenital musculoskeletal disease after congenital hip dislocation and clubfoot, the prevalence reaches from 0.4 to 1.9% (Cheng et al, 2001; Binder et al, 1987). Even after a long time, despite reports of congenital muscular torticollis, the cause of muscular torticollis is still unclear (Do, 2006). The most likely hypothesis, however, are displacement of the fetus, birth trauma, vascular accidents, infections, and genetic lesions in the central nervous system (Brooks, 1992; Ling & Low, 1972; David et al, 1993). Among these, birth trauma due to Breech Presentation or Dystocia is the most frequently reported to account for the disease (Conventry et al, 1960).

Through a great deal of research, different classifications of torticollis have been reported. Torticollis can be classified into three different groups, namely (1) fibromatosis colli, stemamostoid tumor group, the tension of sternocleidomastoid muscle with palpable mass; (2) muscular torticollis which do not have palpable mass but with increased muscular tension (Macdoneld, 1969) and; (3) postural torticollis which does not have a palpable mass nor tension of sternocleidomastoid muscle but, however, has the clinical features of congenital muscular torticollis (Hulbert, 1950). However, many clinicians don’t use the three classifications or groups. They divide it into 2 groups, instead. The first group is the group where a palpable mass has been found through a cervical ultrasound while the other group does not have any traces of a palpable mass.

The treatment of torticollis can be divided into conservative treatment which stretches the shortened sternocleido-mastoid muscle, and surgical treatment. Conservative treatment includes a simple observation(Canale et al, 1982), brace, posture and simple catching exercises (Emercy, 1994), gentle manual stretching (Leung & Leung, 1987), and a vigorous manual manipulation(Hulbert, 1950).

In fact, some of congenital muscular torticollis naturally disappear and are easily corrected manually in its early stages. But initial treatment failure may require surgical treatment so early diagnosis and treatment are also considered very important (Jun et al, 2007). Currently, exercises through physical therapy treatment, manual therapy, therapeutic massages are the most commonly applied in clinical practice. Considering its safety, treatment cost and convenience, physical therapy has its advantages.

This study shows clinical aspects of infants who currently have congenital torticollis, satisfaction in physical therapy, and factors of torticollis.

II. Method