

Manual stretching with neural and visceral manipulation: A boon to correct congenital torticollis.

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Abstract

The Aim is to show that Manual stretching when combined with Neural and visceral manipulation overcomes the criteria where manual stretching individually failed. The combination of manual stretching with neural and visceral Manipulation shows positive findings in congenital torticollis infants. Problems like muscle shortening, Decreased Range of motion, decreased tissue extensibility was cured with manual stretching whereas increasing tolerance of infant for the treatment as well as tension release of entrapped nerves and organs is solved by Neural and Visceral Manipulation. Postural asymmetry is also solved by this combination. The conclusion is that Neural and Visceral Manipulation is given with Manual Stretching to increase tolerance, muscle length, range of motion and to correct Postural asymmetry.

Keywords: Congenital torticollis, Manual stretching, Neural manipulation, Visceral manipulation.

Introduction

In congenital Torticollis, the sternocleidomastoid muscle of one side of the neck is fibrosis and fails to elongate as the child grows, and thus results in a progressive deformity. It leads to a limitation of the head mobility in both rotation and lateral flexion and progressive degrees of neck contracture. It is diagnosed shortly after birth. The cause is unknown but it is possibly a result of ischemic necrosis of sternocleidomastoid muscle at birth or due to sternocleidomastoid tumour. Manual Stretching is given by the therapist who a force is given externally that results in lengthening of the targeted tissue beyond the point of resistance of tissue. Manual stretching increases tissue extensibility, muscle length and Range of motion. Neural manipulation (NM) and visceral manipulation (VM) are other types in physiotherapy which are considered to cause less discomfort to patient and less damage to the tissues. To distinguish between neural manipulation and Visceral Manipulation particular structures those are palpated and treated accordingly [1]. Neural manipulation (NM) is therapy given manually which assesses and treats neural and dural restrictions of the cranium, vertebral column, upper and lower limbs, whereas visceral manipulation (VM) helps in normal mobility/tissue motion of the organs and their connective tissues which are responsible for musculoskeletal asymmetries e.g. posture deformity.

Need

Manual stretching is a treatment of choice for congenital torticollis [2]. Manual stretching have advantage like it increases muscle length, Range of Motion, tissue extensibility, etc but manual stretching also have its disadvantage i.e.

it creates discomfort for the individual on which manual stretching is given. In congenital Torticollis, Infants were found to be crying during the treatment and also were resisting the treatment. To overcome this disadvantage of manual stretching Visceral and Neural Manipulation was combined with Manual Stretching. The Aim was to compensate each other's advantages and disadvantages and to Increase tolerance in infants for the treatment. So there was a need to know more about the effects of combining manual stretching with neural and visceral manipulation on the congenital torticollis.

Discussion

The effect of Neural and visceral manipulation with manual stretching in infants with wry neck was observed. Since there is shortening of sternocleidomastoid muscle, Manual Stretching is treatment of choice [3]. But Many Researchers reported that due to prolonged stretching infant's cries and resist the manual stretching. To ease this problem Neural and Visceral Manipulation is introduced with manual stretching. In wry neck, NM assists in the release the nerves which trapped or impinged within structures (which supplies muscles and joints), so that the tension created in the infant's neck muscles released or decreased. Visceral Manipulation plays important role in releasing the organs and their associated connective tissue in the neck, thorax and abdomen which takes place due to the improper and prolonged position of the infant in the uterus before being delivered [4].

In congenital Torticollis, Postural asymmetry is observed [5]. Postural asymmetry is seen due to the shortening of muscle and compression or restriction due to the improper and prolonged position of the infant in the uterus before being delivered. In some studies it is found that manual therapy can be a cure for flattened

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baby's head and can also improve the asymmetry seen in posture.

To see the effect of manual stretching with neural and visceral manipulation a study took place. In that study, the method of sampling taken was convenient sampling of ten infants all with wry neck (six males, four females; 4.4 months \pm 2.3). These were found by a local hospital, community agencies and pediatricians. Eight sessions were given in total to 10 infants. This research was done with the parents' consent and the study was made clear to them. Here, Manual stretching mainly aims in increasing the Range of motion whereas neural manipulation and visceral manipulation aims in decreasing tissue discomfort or stress. A significant positive result was seen in Cervical ROM due to manual stretching with Neural and visceral Manipulation. The Other reason for the discomfort to the infant is snapping [6].

Infants with tumors in sternocleidomastoid which also received manual stretching had experienced snapping of the sternocleidomastoid muscle. Snapping is a complication which results in tear or rupture of the muscle. It is difficult to heal discomfort by hundred percent; but still the results showed that infants were not crying nor spitting up. Also baby's behaviour after the session was good in response. All infants accepted NM/VM intervention.

To make Infants calm caretakers, parents or guardians were present at the site of treatment. Also infants were engaged in playing this distracted them from the discomfort caused to them due to manual stretching.

Conclusion

The conclusion made is that when Manual Stretching is given with Neural Manipulation and Visceral Manipulation, stress

Responses was tolerated by the infants. Increase in range of motion in neck was also found in the infant with congenital torticollis. Postural asymmetry is also solved by manual stretching with Visceral and Neural Manipulation.

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