

Flex Therapist CEUs

Torticollis

Do obstetric risk factors truly influence the etiopathogenesis of congenital muscular torticollis?

1. Torticollis is a clinical diagnosis where the _____ muscle is shorted on the involved side leading to a lateral tilt toward the affected muscle and contralateral rotation of the face and chin.

- A. Scalenne
- B. Mylohyoid
- C. Sternocleidomastoid
- D. Thyrohyoid

2. All of the following obstetric and newborn risk factors have been proposed for the development of congenital muscular torticollis, except for:

- A. Prolonged labor
- B. Macrosomia
- C. Breech or other irregular fetal presentations
- D. Placenta previa

3. There were found to be significant differences in which birth characteristic?

- A. Children with left- vs. right-sided CMT
- B. Boys vs. girls
- C. Conservative treated vs. surgery
- D. There were no differences found in any of the birth characteristics

4. Previous studies suggest that the side of the torticollis is related to CMT:

- A. By intrauterine positioning.
- B. Due to delivering of the first shoulder.
- C. Previous studies suggest that the side of the torticollis is related to CMT either by intrauterine positioning or due to delivering of the first shoulder.
- D. Neither intrauterine positioning nor delivery of the first shoulder have been suggested as an influence on the side of the CMT.

5. A previous study by Lee et al. found that vaginal births, compared to cesarean sections, had more clinical severity of CMT.

- A. True
- B. False

6. One study found an association between torticollis and the fetus being in the same intrauterine position for more than _____ weeks before delivery.

- A. 4
- B. 6
- C. 8
- D. 10

7. MRI was used to observe the SCM muscle in infants and found signals similar to those in:

- A. Compartment syndrome
- B. Dislocation
- C. Tendinitis
- D. Herniation

8. It has been suggested that stretching of the SCM muscle during delivery may be a direct cause of CMT.

- A. True
- B. False

Spinal manual therapy in infants, children and adolescents: A systematic review and meta-analysis on treatment indication, technique and outcomes

9. Non-musculoskeletal conditions as treatment indication in children differs from manipulative treatment approaches in adults, which are mainly focused on musculoskeletal conditions, such as all of the following, except for:

- A. Scoliosis
- B. Headache
- C. Neck pain
- D. Low back pain

10. Gentle, low-velocity mobilization techniques appear to be a safe treatment technique in infants and children.

- A. True
- B. False

11. Cervical and full spine HVLA manipulations might be associated with severe harms.

- A. True
- B. False

12. All of the following mild, transient harms were reported in HVLA manipulation studies, except for:

- A. Stiffness
- B. Joint dislocation
- C. Soreness
- D. Headache

Longitudinal follow-up of muscle echotexture in infants with congenital muscular torticollis

13. Infants with CMT feature unilateral fibrous contracture of the SCM muscle with all of the following characteristics, except for:

- A. Smooth philtrum
- B. Head tilt
- C. Limited neck rotation
- D. Palpable mass

14. Physical examination is sufficient in diagnosing CMT in infants, even those with minimal clinical presentations.

- A. True
- B. False

15. Using ultrasonography, most infants showed type III fibrosis, which was altered during follow-up to become a pseudo-tumor.

- A. True
- B. False

16. Findings in _____ measurements may reflect clinical improvement but cannot directly reflect the progress of muscle fibrosis during follow-up.

- A. Fibrosis type
- B. Muscle thickness
- C. Head tilt angle
- D. Neck rotation

17. Strong correlations were observed between the percentage of _____ seen on MRI and muscle echo intensity.

- A. Fat free mass
- B. Muscle hydration
- C. Intramuscular fat
- D. All of the above

18. Animal studies showed muscle echo intensity highly correlated with the extent of fibrosis in affected muscles.

- A. True
- B. False

19. The initial K values of the infants with CMT represented a narrow degree of fibrosis in affected SCM muscles indicating only two different types of fibrosis.

- A. True
- B. False

20. After receiving regular physiotherapy, the CMT infants in this study showed a _____ in K values during follow-up on serial sonograms of affected SCM muscles.

- A. Non-significant increase
- B. Significant increase
- C. Non-significant decrease
- D. Significant decrease

21. An increase in K value indicates that the MEI for involved muscle approaches that for uninvolved muscle, for overall decreased muscle fibrosis.

- A. True
- B. False

22. Muscle biopsy specimens from patients with neuromuscular disease show common histopathologic findings of atrophied muscle fibers and increased perimysial fibrosis.

- A. True
- B. False

23. Muscle echo intensity has been clinically used to quantify severity of muscle fibrosis in patients with:

- A. Duchenne muscular dystrophy
- B. Inflammatory myopathy
- C. Metabolic myopathy
- D. Muscle echo intensity has been clinically used to quantify severity of muscle fibrosis in patients with Duchenne muscular dystrophy, inflammatory myopathy, metabolic myopathy, and lumbar radiculopathy

24. The uninvolved muscle thickness did not change along the follow-up period.

- A. True
- B. False

25. Selective activation of _____ caused by the release of insulin growth factor-1 from muscle fibers during passive stretch promotes myosatellite cell proliferation and induces skeletal muscle hypertrophy.

- A. Protein kinase B
- B. Growth hormone
- C. Ghrelin
- D. Mammalian target of rapamycin complex 1

26. Stretch-induced antifibrotic effects, as much as the well-known antifibrotic agent _____, has been reported in injured gastrocnemius muscles of rats.

- A. Versican
- B. Brevican
- C. Decorin
- D. Aggrecan

27. Which of the following may affect the improvement of SCM muscle fibrosis as reflected in the change in K value during follow-up?

- A. Normal growth and development
- B. Physiotherapy
- C. Both normal growth and development and physiotherapy
- D. Neither normal growth and development nor physiotherapy

28. This study found an increasing trend of uninvolved muscle thickness during follow-up, with a significant increase at about:

- A. 1 month
- B. 3 months
- C. 6 months
- D. 12 months

29. Results of this study showed that involved SCM muscle thickness was related to treatment period.

- A. True
- B. False

30. According to the observations in this study, infants with high initial K value will receive a long treatment course and frequent US examinations.

- A. True
- B. False

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