

SPASMUS NUTANS AND TORTICOLLIS: THE ROLE OF MULTIDISCIPLINARY EVALUATION IN EARLY CHILDHOOD DIAGNOSIS AND MANAGEMENT

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Background

Congenital muscular torticollis is the most common form of congenital torticollis, but acquired causes must be considered, especially after 6-month-old. Spasmus Nutans (SN) is an acquired nystagmus affecting children under two years old, characterized by asymmetric, pendular nystagmus, head nodding, and torticollis. Its cause remains unknown, but it is usually not associated to neurological disorders.

Case report

A 4-month-old child with no relevant medical history was referred to the Physical and Rehabilitation Medicine (PRM) department for right equinovarus foot evaluation. Examination revealed a right flexible, reducible equinovarus foot and bilateral convergent strabismus. Cervical examination was normal, and developmental milestones were appropriate for age. Transfontanelar ultrasound showed no abnormalities. Ophthalmology confirmed congenital strabismus and initiated daily alternating eye patching for six hours. Ultrasound revealed no abnormalities. At 7-months-old parents noticed a new right-sided cervical tilt, sometimes with neck flexion and extension movements. Examination showed convergent strabismus, nystagmus, right cervical tilt, and intermittent head nodding. Cranial, cervical, and neck MRI were normal. A multidisciplinary discussion involving PMR, Neonatology and Ophthalmology was conducted, and the diagnosis of SN and strabismus was made. Child was treated with ocular botulinum toxin. At 22-months-old, examination showed right eye unchanged, left eye with slightly limited adduction, no nystagmus or right cervical tilt. Follow up was scheduled in two months.

Conclusion

SN is an idiopathic disorder in which head nodding suppresses nystagmus through the vestibular-ocular reflex and aids vision. Diagnosis relies on excluding neurological and ophthalmological diseases and treatment is mainly supportive including strabismus, amblyopia and refractive errors correction. It is usually a limited condition with good prognosis. PMR is key in child developmental evaluation, with each appointment addressing both the primary condition and overall neurodevelopment. This case highlights significance of comprehensive assessment, early diagnosis, and the importance of a multidisciplinary team in promoting motor recovery and quality of life.

Keywords: Spasmus Nutens, Torticollis, Rehabilitation, Children