E-Poster

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From Head to Toe: An Equinovarus Foot to Torticollis in the Context of Ophthalmological Pathology - Spasmus Nutans and Strabismus

Topic: Specific Target Groups (Children, Women, Elderly, Athletes, Musicians, Refugees, Ethnic Groups, Workers, and Others)

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BACKGROUND

Torticollis is usually benign, but other potential causes-such as ophthalmological, neurological, or vertebral malformations—should be considered. A thorough, multidisciplinary evaluation is essential to rule out non-muscular origins. One such is Spasmus Nutans (SN), an acquired form of nystagmus that affects children under the age of two. It is characterized by the clinical triad of asymmetric and pendular nystagmus, head nodding, and torticollis. While its exact cause remains unknown, it is generally not associated with neurological disorders.

CASE DESCRIPTION

A one-month-old girl with no relevant medical history was referred to the Physical Medicine and Rehabilitation (PMR) department for evaluation of birth diagnosed right equinovarus foot. Examination showed right flexible and reducible equinovarus foot, full cervical range of motion (ROM) with no asymmetries. No further changes besides bilateral convergent strabismus normal on newborns. Regarding these findings, counseling along with rehabilitation program was recommended.

At the four-month PMR follow-up bilateral convergent strabismus persisted. No chances on cervical examination, with appropriate cephalic control. Developmental evaluation consistent with age. Transfontanellar ultrasound was requested, along with ophthalmology referral. Ophthalmology assessment confirmed congenital strabismus and started daily alternating eye patching for six hours. Ultrasound revealed no abnormalities.

At the seven-month follow-up, parents reported new right-sided cervical tilt, occasionally accompanied by neck flexion and extension movements. Examination showed convergent strabismus, nystagmus, and right cervical tilt along with head intermittent nodding. Cranial, cervical, and neck magnetic resonance imaging (MRI) showed no abnormalities. Given these findings, 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 the age of 22-month, examination with right eye unchanged; left eye with slightly limited adduction. No nystagmus or right cervical tilt. Follow-up was scheduled in two months.

DISCUSSION

Spasmus Nutans is an idiopathic disorder in which head nodding suppresses nystagmus through the vestibular-ocular reflex and aids vision. Diagnosis relies on exclusion of neurological and ophthalmological diseases and treatment is mainly supportive including strabismus, amblyopia and refractive errors correction. It is typically limited condition with a good prognosis.

CONCLUSION

Physical Medicine and Rehabilitation plays a key role in child developmental evaluation. Each appointment must focus not only on the primary condition but also on overall neurodevelopment. This case highlights significance of comprehensive evaluation, enabling early diagnosis, and the importance of a multidisciplinary team in promoting motor recovery and improving quality of life.

Statement of Disclosures

None

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