TORTICOLLIS AS A SIGN OF A BRAINSTEM TUMOR: TWO CASES

Wacker, KI

Children's Hospitals and Clinics of Minnesota

None

IRB approval not necessary for a case report. Both families provided verbal consent.

Background and Purpose: Torticollis is commonly congenital muscular torticollis. Other causes include boney anomalies, neurological abnormalities, or visual impairments. A brain tumor may cause torticollis, but rarely without other symptoms. The purpose of this case report is to describe two children with torticollis as the first sign of a brain tumor.

Case Descriptions: Child one was referred to PT at 6 months, presenting with a right head tilt. Interventions included strengthening, ROM, and increased frequency of visits; all with little improvement in head tilt. He had normal cervical spine x-rays, SCM ultrasound, and CT scan. Eye surgery resulted in minimal improvement in his tilt. After episodes of dizziness and vomiting, an MRI at 23 months of age revealed a brainstem tumor. Child two initiated PT at 9 months for a right head tilt. Interventions focused on strengthening, ROM, and positioning; all with minimal improvement in head tilt. At age 3, he had an endoscopy for GERD. By 4, he complained of headaches. At 6, an MRI to investigate poor voice quality revealed a large brainstem tumor.

Outcomes: Both children had torticollis that did not respond to PT interventions. Both had significant medical work-ups prior to diagnosis of a brain tumor. Child one had a 17 month span between diagnosis of torticollis and diagnosis of a brain tumor. Child two had an interval of 6 years between onset of torticollis and diagnosis of brain tumor.

Discussion: There is limited research on the incidence of torticollis as a sign of a brain tumor. These cases demonstrate that atypical torticollis may be an indicator of a brainstem tumor in the absence of classic neurological signs (ataxia, headache, vomiting). It is imperative for a physical therapist to consider a brain tumor as a part of differential diagnosis and be persistent about additional evaluation.