Torticollis as a manifestation of lamina fracture in an infant

Madam, Torticollis is a deformity characterized by lateral inclination of the head, torsion of the neck, and deviation of the face.[1-3] A female child of one year age, presented with the history of fall from 5-6 feet height. She had transient loss of consciousness. When the child regained consciousness, the mother noticed that she was having torticollis with painful neck movements (Figure, left). There was no history of vomiting or seizures. There were no neurological deficits. X-ray cervical spine was inconclusive. CT scan cervical spine showed fracture of C3 lamina on right side (Figure, right). The child was managed conservatively with a hard cervical collar and

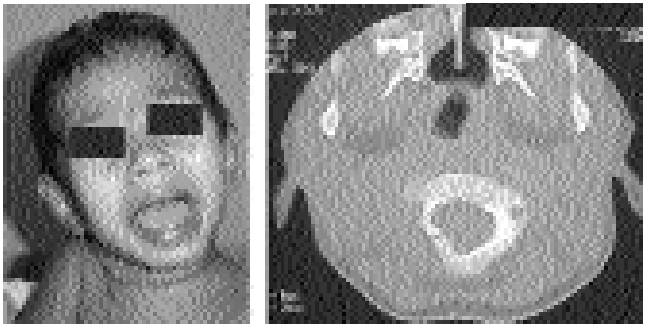

Figure: Clinical photograph showing torticollis (left), CT scan bone window showing fracture of C3 lamina or right side (right).

was doing well at follow up. Torticollis is a rather nonspecific sign and may result from a wide variety of abnormalities, including trauma, inflammation, muscular spasm, spinal cord and central nervous system abnormalities, and gastroesophageal reflux.[2-4] In children less than 1 year of age, the most common cause of torticollis is related to injury of the sternocleidomastoid muscle.[2] In this age group cervical spine injury are usually benign and severe spinal trauma is exceptional.[5] As in the present case the torticollis makes interpreting the lateral cervical spine radiographs difficult, with the mandible often obscuring the upper cervical spine. Computed tomography with multiplanar reconstructions is therefore an invaluable aid to the diagnosis and eventual surgical planning.[2-4] Usually in children, torticollis following trauma to the cervical spine, may be the manifestation of atlanto-axial dislocation but in present case the presentation of cervical lamina fracture as torticollis is unique and have not been described previously. The crucial point in the young patients is to differentiate torticollis that may be due to structural changes than from that of a compensatory or functional nature.[4]

Damodar Nanaji Balpande[1], Amit Agrawal[2], Vijaysingh Kalyanrao Bhatlawande[3]

Department of Paediatrics[1,3], Department of Surgery[2]

Datta Meghe Institute of Medical Sciences, Sawangi (Meghe), Wardha, India.

References

1. Cheng JC, Tang SP, Chen TM, Wong MW, Wong EM. The clinical presentation and outcome of treatment of congenital muscular torticollis in infants- a study of 1,086 cases. J Pediatr Surg. 2000;35:1091-6.
2. Cohen H, Nussinovitch M, Ashkenasi A, Straussberg R, Kauschanksy A, Frydman M. Benign paroxysmal torticollis in infancy. Pediatr Neurol 1993; 9:488-90
3. Herman MJ. Torticollis in infants and children: common and unusual causes. Instr Course Lect 2006; 55:647-53.
4. Clark RN. Diagnosis and management of torticollis. Pediatr Ann 1976; 5:43-57.
5. Borne G, Bedou G, Garidou JP, Giraud JP, Pinaudeau M. [Cervical spine injuries in children] J Chir (Paris) 1983; 120:455-9.