



A Child with Recurrent Vomiting and Short Neck

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To the Editor: An eight-year-old boy presented with multiple episodes of vomiting and dizziness for 7 d. He had a history of similar episodes of recurrent vomiting for the last four years. Vomiting would occur 15–20 times per day, containing ingested food and water. These episodes used to occur every 3–4 mo, and each episode lasted for 3–4 d. The child was asymptomatic in between these episodes. On examination, his weight and height suggested acute on chronic malnutrition and head circumference was normal. His neck length was 9.5 cm (normal range 13.87–14.01 cm) (Supplementary Fig. 1A), and neck body ratio was 8.19 (normal range 12.53–12.88) [1]. Systemic examination was normal. Ultrasonography of the abdomen, liver and renal function test, serum amylase and lipase and upper gastrointestinal endoscopy were unremarkable. X-ray neck showed block C1–2 and C3–4 vertebra (Supplementary Fig. 1B). Magnetic resonance imaging (MRI) of the brain and spine showed Chiari 1 malformation with tonsillar herniation of 5.2 mm (Supplementary Fig. 1C).

This case aims to sensitize the clinician about extra-intestinal causes of recurrent vomiting in children. Common extra-intestinal causes of vomiting include renal stones, Addison's disease, carcinoid syndrome, Zollinger-Ellison syndrome, Chiari malformation, inborn error of metabolisms and abdominal migraine [2]. Short neck is a significant feature seen in craniovertebral anomalies such as Chiari malformation, which can present with recurrent vomiting [1]. Chronic recurrent vomiting with a short neck made us think of craniovertebral

anomaly which was confirmed with MRI. Proposed pathogenesis for vomiting in Chiari malformation is direct pressure on vomiting center situated in the brainstem [3]. White et al. reported a similar case of recurrent profuse vomiting in a 12-y-old boy with Chiari 1 malformation and symptoms relieved following craniocervical decompression surgery [3].

To conclude, assessment of neck length in a child with recurrent vomiting may help in early diagnosis of craniovertebral anomalies.

Compliance with Ethical Standards

Conflict of Interest None.

References

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