Recurrent temporomandibular joint dislocation secondary to epilepsy

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DESCRIPTION

An 84-year-old incommunicable woman with a history of left cerebral haemorrhage presented with five episodes of temporomandibular joint (TMJ) dislocation in 1 month. Each dislocation was associated with an ocular deviation, which resolved spontaneously within 1 hour and manual reductions were attempted. A physical examination revealed strong rigidity and anterior dislocation of the bilateral TMJ (**figure 1A**) and conjugate ocular deviation towards the left (**figure 1B**). A head CT scan showed no brain mass or bleeding. Electroencephalography was performed during the attack and the signals showed epileptiform discharges (**figure 2**). Diazepam reduced her rigidity (**figure 1C**) and conjugate ocular deviation. The patient was started on levetiracetam and these symptoms resolved.

Diseases including Parkinson's disease, Huntington's disease, muscular dystrophy and seizure disorders that affect muscular tone or coordination can result in TMJ dislocation.¹ However, dislocation of the TMJ due to seizures has rarely been reported.^{2,3} Another case reported that epileptic seizures could cause shoulder dislocations other than TMJ dislocations.⁴ Our case captured the epileptic attack and the association between dislocation of the TMJ and epilepsy was confirmed. It is important for generalists to consider the possibility of seizure if they notice recurrent dislocation of the TMJ in incommunicable patients. Both control of the seizure and skills of manual reduction are needed if TMJ dislocation occurs secondary to epilepsy.

Figure 1 (A) Temporomandibular joint dislocations. (B) Conjugate ocular deviation towards the left. (C) Recovered temporomandibular joint dislocations after the administration of diazepam.

Figure 2 An electroencephalography during the attack showing epileptiform discharges.

Learning points

- ▶ Dislocation of temporomandibular joint (TMJ) could occur due to epilepsy.
- ▶ It is important to consider the possibility of seizure if they notice recurrent dislocation of TMJ in incommunicable patients.
- ▶ Both control of the seizure and skills of manual reduction are needed if TMJ dislocation occurs secondary to epilepsy.

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