Letter to Editor

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An unexpected cause of post-operative temporomandibular joint subluxation

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Sir,

A young, healthy, 20 years male was taken up for excision of tongue hemangioma of size 2 x 3 cm on the left anterior one-third of the dorsum of the tongue. He had no other anomaly and airway examination revealed an oral mass which was not expected to pose much difficulty in intubation. Standard anesthesia induction was instituted with smooth and uneventful insertion of 8.5 mm endotracheal tube using a Bonfil'sretromolar scope through midline approach. Oro-pharyngeal packing was done and Denhardt's mouth retractor was applied on the left sidefor surgical exposure by the surgeon. Intraoperative period, reversal and extubation were uneventful. Post operatively, upon regaining full consciousness, the patient complained of pain and swelling over left Temporomandibular Joint (TMJ) with inability to close the mouth. The anesthesiologist and surgeon diagnosed it as left TMJ subluxation. The subluxation was corrected by manual reduction under sedation with propofol. Immediate pain relief with return of full range of movement was achieved. On retrospective history the patient denied any such previous episodes.

The temporomandibular joint is a synovial joint, allowing both hinging and gliding movements. Its normal function depends upon coordinated muscle contraction around an intact condyle and disc complex. There are some reported cases of TMJ dislocation occurring in the perioperative settings. Incidence of TM joint dysfunction in normal patients after direct laryngoscopy under general anesthesia is high, specially in patients with inherently lax ligaments[1]. Most cases reveal a positive previous history of such episodes occurring spontaneously while yawning[2]. Other cases of peri-operative TMJ subluxation have been associated with bag and mask ventilation, laryngoscopy with application of excessive force, retromolar scope, trachlight, nasogastric tube, oropharyngeal airway, application of mouth retractors, bronchoscopy[3] and insertion of LMA[4].

In our case there was iatrogenic disruption of left TM joint as there was no such previous episode. It was most likely due to use of Denhardt'sretractor (Picture 1) because dislocation was on the same side as that of application of the retractor. Also, no intubation difficulty was encountered resulting in force being applied with the retromolar scope introduced through midline approach. A general awareness of the potential for jaw dislocation during routine anesthetic or surgical maneuvers is important so that an informed anaesthetist is in a position to diagnose and treat these dislocations. The technique involves exertion of inferior pressure over the base of the coronoid as the first step of reducing dislocation followed by forward disengagement[1].

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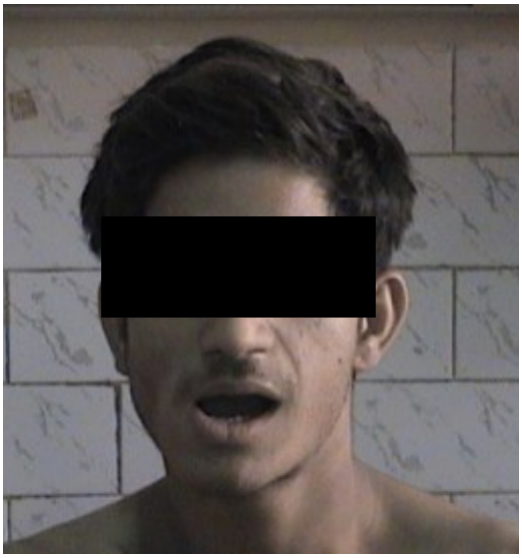

Figure 1. Dislocated TM joint in patient.

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