Temporomandibular Subluxation: A Rare Complication Following Esophagogastroduodenoscopy

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Introduction

Temporomandibular subluxation has been reported in literature as a rare complication of prolonged dentistry procedures, intubations, bronchoscopies, transesophageal echocardiograms, and otolaryngology procedures. In contrast, temporomandibular subluxation is not a widely reported complication of esophagogastroduodenoscopy, with extremely limited prior case reports highlighting this complication. In this case report, we present a patient with no prior history of mandibular motion who presented with a left sided temporomandibular subluxation immediately following upper endoscopy.

Case Report

A 69 year old female with history of rheumatoid arthritis, dysphagia, and gastroesophageal reflux disease presented to the surgery with progressively worsening dysphagia. An esophagogastroduodenoscopy with biopsy was performed without difficulty. Local monitored anesthesia care with intravenous sedation was administered during the case and patient tolerated the procedure well. In the post anesthesia care unit, the patient was noted to have a left sided deviation of the mandible.

Case Report Cont.

She also exhibited difficulty closing her jaw with significant left jaw pain noted over the left temporomandibular joint area. Patient denied any history of temporomandibular joint disorder or problems with mandibular motion in the past. ENT was consulted and promptly reset the patient's mandible in the post anesthesia care unit without any further complication.

Discussion

Upon review of available literature, 7 unique cases have been reported within the last 35 years regarding temporomandibular subluxation following esophagogastroduodenoscopies. Sedation performed by anesthesia varied greatly making it difficult to define specific risk factors that may have caused the complication. It is clear that anterior dislocations are prominent among the reported cases, with both unilateral and bilateral dislocations being identified. Particularly in the context of anterior dislocation, it is theorized that past history of TMJ dysfunction is the strongest predisposing risk factor for temporomandibular dislocation during upper endoscopy.

Discussion Cont.

However, it has also been defined in the literature that compromised temporomandibular joints via inadequate capsular integrity, excessive dosage of anesthetic agents leading to excessive masticatory hypotonicity, and compromised articular eminence morphology can also lead to the complication. In addition, increased age could be a predisposing factor to temporomandibular subluxation regardless of procedure time, with increased procedure time being its own independent risk factor.

Conclusion

It is important to note that no particular recommendations exist currently regarding prevention of temporomandibular subluxation following esophagogastroduodenoscopy, in part due to the limited number of cases that have been reported. Consultation or referral to an oral and maxillofacial surgeon is recommended if the provider is uncomfortable with the complexity of the clinical presentation and/or if previous attempts at reduction have failed. Furthermore, consultation is highly recommended if a concomitant fracture is noted.