Uvular necrosis after gynecologic surgery: a case report

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Abstract
Uvular necrosis is a rare complication after endotracheal intubation and upper endoscopy. A 49-year-old woman underwent surgery for uterine prolapse, rectocele, and stress urinary incontinence under general anesthesia with endotracheal intubation. The patient reported sore throat, dysphagia, and a foreign-body sensation the day after surgery. Oropharynx examination showed an inflamed uvula with a necrotic tip. She received conservative treatment and had complete symptom resolution within 2 weeks.

Keywords: Gynecologic surgical procedures, necrosis, oropharynx, trendelenburg position, uvula

Background
Sore throat commonly occurs after endotracheal intubation with an estimated incidence of 40% [1]. More serious complications related to endotracheal intubation are uncommon and include dislocation of arytenoid cartilage, aspiration of gastric contents, and damage to teeth or endotracheal mucosa. Uvular necrosis is a rare complication that has been described after endotracheal intubation and upper endoscopy. We report a case of uvular necrosis after intubation of a patient undergoing gynecologic surgery in the Trendelenburg position.

Case
A 49-year-old woman with uterine prolapse, rectocele, and stress urinary incontinence underwent vaginal hysterectomy, bilateral salpingectomy, posterior colpopereineorrhaphy, retropubic midurethral sling, placement of a suprapubic catheter, and cystoscopy. Her past medical history was significant for 2% viscous lidocaine solution (swish and spit 15 mL every 3 hours) as needed for discomfort. An oral course of ciprofloxacin urinary tract infection prophylaxis also was prescribed on discharge from hospital, which is a standard approach for all patients with a midurethral sling at our institution. Antibiotics were not prescribed for the indication of prophylaxis against infection from uvular necrosis. The patient was discharged to home with these 2 medications on day 2 after surgery. She was reassured that the problem was self-limited, and her symptoms resolved within 2 weeks.

Discussion
Uvular necrosis is a rare complication associated with endotracheal intubation and upper endoscopy. Review of the English-language medical literature showed case reports of uvular necrosis after endotracheal intubation [3-6] and upper...
Additionally, physical examination shows a characteristic Trendelenburg would not be harmful and may prevent this complication in gynecologic patients.

The present patient had been placed in Trendelenburg position for the duration of her surgical procedure. Trendelenburg position increases central venous pressure and decreases venous return from the head and neck [8]. It is possible that this vascular congestion and resultant edema contributed to the occurrence of uvular necrosis in this patient. The role of patient positioning has not been reported previously as a possible etiologic factor. The rarity of this complication makes it difficult to make any specific conclusions regarding predisposing factors or preventative strategies. However, it seems reasonable that being mindful of the duration of steep Trendelenburg with occasional re-positioning out of Trendelenburg would not be harmful and may prevent this complication in gynecologic patients.

Review of the literature also showed that onset of symptoms, such as sore throat, a foreign-body sensation, or odynophagia, occurs within the first 24 hours after the procedure [3-7]. Additionally, physical examination shows a characteristic necrotic distal uvula separated from healthy tissue by a well-demarcated line [3-7]. Management of this condition has been reported to be conservative, ranging from expectant management to supportive symptomatic treatment with analgesics [5,7] and topical anesthetic [7] to use of oral antibiotics [4-7] and corticosteroids [4,7]. Overall good clinical outcome should occur in all patients. In the cases reported in the medical literature and in the present case as well, the uvula healed and the patient’s symptoms resolved within 2 weeks (range, 5-14 days) [3-7] after the procedure.

Conclusion

Although report of a sore throat after endotracheal intubation is common [3], severe or persistent symptoms or the report of a foreign-body sensation in the throat should prompt further assessment and the inclusion of uvular necrosis in the differential diagnosis.

Competing interests

The authors declare that they have no competing interests.

Authors’ contributions

SK-F drafted the written manuscript; ERC conceived of the case report and participated in manuscript editing; CJJ participated in manuscript editing; JBG participated in manuscript editing. All authors read and approved the final manuscript.

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