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Images in Anesthesiology: Pediatric Tongue Injury after Transesophageal Echocardiography for Cardiac Transplantation

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A 13-YR-OLD female with congenital heart disease underwent cardiac transplantation. Postoperatively, the patient was noted to have edema and ulceration of her tongue (fig. A) following the intraoral course of the transesophageal echocardiography probe. The injury extended linearly, from the mid portion of the left anterior tongue to the right posterior tongue base and uvula. No airway compromise was noted at extubation, but the patient reported severe odynophagia. Her symptoms improved by the fourth postoperative month despite a persistent scar (fig. B).

Postoperative glossal edema has been reported in children^{1,2} after sitting neurosurgical procedures and in adult cardiac surgery with transesophageal echocardiography.³ Glossal compression can impair tissue perfusion and venous drainage, causing ischemia and edema.³ In severe cases, airway obstruction can occur, and necrotic tissue may require debridement.

This patient's injury likely resulted from compression after prolonged (8 h) transesophageal echocardiography. Low preoperative cardiac output compounded by hypothermia (34 °C) during cardiopulmonary bypass may have predisposed to ischemia. Suggested preventative measures include downsizing transesophageal echocardiography probes for lengthy procedures, gentle repositioning of the probe at regular intervals, and timely removal in the postbypass period.

Competing Interests

The authors declare no competing interests.

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