Acute Sialadenitis After Intubation

Ivan Urits¹ , Vwaire Orhurhu¹ , George Chesteen² , Cyrus Yazdi¹ , Omar Viswanath³

¹Beth Israel Deaconess Medical Center, Department of Anesthesia, Critical Care, and Pain Medicine, Harvard Medical School, Boston, MA, USA

²Barrow Neurological Institute, Phoenix, AZ, USA

³Valley Anesthesiology and Pain Consultants – Envision Physician Services, Phoenix, AZ; University of Arizona College of Medicine-Phoenix, Department of Anesthesiology, Phoenix, AZ; Creighton University School of Medicine, Department of Anesthesiology, Omaha, NE, USA

Cite this article as: Urits I, Orhurhu V, Chesteen G, Yazdi C, Viswanath O. Acute Sialadenitis After Intubation. Turk J Anaesthesiol Reanim 2020; 48(3): 263.

Acute post-operative sialadenitis can be caused by duct obstruction or submandibular gland injury. Although rarely presenting, it is thought that during surgery, the intra-operative head and endotracheal tube position leads to compression of the submandibular gland and surrounding tissues, thereby effectively limiting drainage (1). The patient in our study was a 42-year-old woman with no remarkable medical history who underwent right retrosigmoid craniotomy for resection of a brain mass. Her surgery proceeded without complication, and she was uneventfully extubated. On post-operative day 1 (POD1), the patient developed severe left neck swelling, although no stridor or wheezing was noted on lung examination. Computed tomography (CT) revealed a profoundly oedematous left submandibular gland (Figure 1). Patients who develop acute sialadenitis may experience severe upper airway swelling and obstruction, thus necessitating intubation.

Figure 1. a-c. (a) Axial (b) sagittal and (c) coronal computed tomography findings demonstrate prominent enhancement of the oedematous left submandibular gland with significant adjacent oedema and inflammatory stranding. No evidence of a sialolith suggests intra-operative drainage obstruction as the inciting cause

Informed Consent: Written informed consent was obtained from the patient who participated in this study.

Peer-review: Externally peer-reviewed.

Author Contributions: Concept – O.V., I.U.; Design – V.O., I.U., O.V.; Supervision – C.Y., O.V.; Resources – G.C., V.O., I.U., O.V., C.Y.; Materials – I.U.; Data Collection and/or Processing – O.V., C.Y., G.C.; Analysis and/or Interpretation – I.U., V.O., G.C., C.Y., O.V.; Literature Search – I.U., V.O.; Writing Manuscript – I.U., O.V.; Critical Review – C.Y., O.V.; Other – I.U., O.V., V.O., G.C., C.Y.

Conflict of Interest: The authors have no conflicts of interest to declare.

Financial Disclosure: The authors declared that this study has received no financial support.

References

1. Uchino H, Motegi H, Kobayashi H, Kamoshima Y, Kazumata K, Terasaka S, et al. Postoperative acute submandibular sialadenitis after neurosurgery: two case reports and a review of the literature. NMC Case Rep J 2015; 3: 1-4. [\[CrossRef\]](#)