Mucocele: Retention and extravasation types

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The most common non-neoplastic lesion of salivary gland tissue is the mucocele (also called sialocele and ptyalocele). A mucocele is defined as the pooling of mucin in a cystic cavity. Two types of mucoceles are recognized: (1) the retention type, in which the mucin pooling is confined within a dilated excretory duct or cyst, and (2) the extravasation type, in which mucin is spilled into the connective tissues from a ruptured or traumatized salivary gland duct.

The extravasation type is the most common mucocele, more common in children and young adults, with a peak in the second decade of life. The lower lip is the most commonly affected site, followed by the floor of the mouth and ventral tongue. Patients present with a dome-shaped swelling, often with a blue hue due to the extravasated mucin. If small, the lesion may appear as a blister. Within the floor of mouth, the term ranula may be applied to mucin which dissects into the mylohyoid muscle, resulting in chin or upper neck swelling (rana in Latin means frog, and ranula is used since it looks like a frog's underbelly clinically). When large, a ranula may actually interfere with speech by elevating the tongue. In general, excision of the lesion to include adjacent minor mucoserous glands will reduce the chance of recurrence.

Macroscopically, mucoceles range in size from millimeters to several centimeters, depending on the location. Histologically, two patterns are seen: an intact epithelium-lined duct, which is dilated to form a cyst, filled with mucin and inflammatory debris; or extravasated mucin. If small, the lesion may appear as a blister. Within the floor of mouth, the term ranula may be applied to mucin which dissects into the mylohyoid muscle, resulting in chin or upper neck swelling (rana in Latin means frog, and ranula is used since it looks like a frog's underbelly clinically). When large, a ranula may actually interfere with speech by elevating the tongue. In general, excision of the lesion to include adjacent minor mucoserous glands will reduce the chance of recurrence.
spinal needle bent at the tip works well, but the shaft flexibility is challenging; a curved tonsil needle is ideally suited.

The posterior nasal cavity is primarily supplied by the sphenopalatine ganglion, which is blocked by injecting at the posteroinferior attachment of the middle turbinate. Additional injections may be made along the inferior turbinate or septum depending on the procedure. The practitioner should wait 10 minutes to ensure that adequate anesthesia and vasoconstriction are achieved.

In conclusion, knowledge of nasal anatomy, use of decongestants, a combination of topical and injectable medications, and adequate time for anesthesia effect allow the otolaryngologist to comfortably perform a wide variety of nasal procedures using local anesthesia.

References

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