DEN 2311 Oral Pathology

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Yanling Feng

Ranula

Ranula which is seen on the floor of the mouth, it usually presents unilaterally in the oral cavity in relation to the sublingual gland, and occasionally the submandibular gland duct. The name ranula came from the Latin word “Rana” meaning frog. It is named because the appearance of a ranula resembles with the underbelly of the frog. There are three types of ranula. The first and most common type is the “sublingual type” which presents as sublingual swelling. The second one is called “plunging ranula” which presents as a cervical swelling crossing beyond the mylohyoid muscle. The third one is called “plunging sublingual ranula” which is mixed both sublingual and plunging ranula components.

 The etiology of a ranula mainly caused by rupture or damage of the sublingual ducts that leads to extravasation of mucous or dilatation of sublingual duct. Ranula was most prevalent in children and young adults in the second decade of age and slightly prevalent in females. Sublingual type of ranula was most commonly involves on the left side; while both plunging and mixed ranula were commonly involved on the right side.

 A patient who had Ranula usually visited to the dental office with chief complain of a large painless swelling on the floor of the mouth. Most of these lesions are asymptomatic. Clinically, ranula appears as a bluish, well-circumscribed, soft painless, fluid-containing intraoral swelling lesion on the floor of the mouth. It may be associated with difficulty in swallowing.

 Clinical assessment, ultrasound, histopathological examination and magnetic resonance imaging (MRI) could be used as diagnostic tests for Ranula. However, MRI is the most sensitive imaging for the evaluation of the sublingual gland. The differential diagnosis that can be confused with few lesions can mimic a ranula include dermoid cysts, salivary duct cysts, and neoplasm. Biopsy of the cystic wall is recommended for histopathology diagnosis to rule out the presence of squamous cell carcinoma. Histopathological examination of the mass showed mucous lined cystic mass with clear fluid, which was consistent with a diagnosis of Ranula.

Ranula is slowed gradually growing mass over a period of time that can reach a huge size without treatment. It may be associated with difficulty in swallowing and eating. It may rupture and release their mucin contents. There are various treatment options have been experienced over the past to treat this condition, including the cryosurgery, marsupialization, incision and drainage and simple excision of the ranula. Among these treatments, the most accepted treatment of ranula is the excision of the ranula along with the underlying sublingual gland. It has a minimum recurrence rate. The most common complication following surgical therapy of ranula is the risk for paresis and paralysis of the marginal mandibular nerve.

Knowledge of both general and systemic pathology is important for dental hygienists in treating patients as we may encounter patients with an oral lesion. Thus, the more we know it helps us to recognize a lesion without panic. Ranula is relevant to dental hygienists as a patient may walk into the dental office with this condition. As a dental hygienist, we are maybe the first one to do the oral assessment for the patient in a dental office. Patients with a ranula may have trouble with speech, movement of tongue depend upon on the size of the ranula. Therefore, it is significant for us to recognize the characteristics of a ranula and report it to the dentist. Patient with a ranula, they may difficulty to clean their mouth, especially for the mandible. Still, before the treatment of the ranula, it is significant to advise the patient to maintain good oral hygiene with this oral condition.

References

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