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Ranula in an adult case series

Shahaji Chavan, Vinayak Kshirsagar, Mahendra Bendre, Sagar Ramesh Ambre*, Rahul Banik, Nishant Tripathi, Vishal Sharma

Department of Surgery, DPU, Pune, Maharashtra, India

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***Correspondence:**
Dr. Sagar Ramesh Ambre,
E-mail: sagarmssurgery@gmail.com

ABSTRACT

The ranula is a cyst like mass arising from sublingual gland. It originates from extravasation of mucus from sublingual gland. Ranula can be simple and plunging. The name came from latin word means frog. The ranula can be seen in intraoral and it affects the submandibular space and adjacent structure in the neck. This paper reviews case series of two case of ranula one in floor of mouth and one in the floor and affecting the submandibular space plunging ranula; both case been successfully treated marsupialization were done in first case and excision of the sublingual gland were done in second case. No complication was observed during intraoperative and postoperative period and both patients are in follow up there is no recurrence in 1 year period till now.

Keywords: Frog, Marsupialization, Plunging ranula, Sublingual gland

INTRODUCTION

The Ranula is a cyst like mass arising from sublingual gland.[1] It originate from extravasations of mucus from sublingual gland.[2,3] It was frequently occurring in patients under the age of 30 years and rarely in young children.[4] The most common site is lateral floor of the oral cavity. It can also interfere with speech due to upward and medial displacement of tongue. Plunging ranula occurs when the ranula goes beyond the mylohyoid muscle and swelling in the submandibular space.[4,5] The etiology of ranula is block of sublingual duct, trauma to duct, and it may be iatrogenic. Ranula have accounts for 6% of all oral sialocysts. PR is uncommon condition in children under 10 years of age.[6] The diagnosis of ranula is made using proper history, CT, MRI, USG plays an important role. Surgical and non-surgical method are used to treat ranula. A case series of ranula in oral cavity and PR Plunging Ranula in submandibular region and oral cavity is discussed along with review of literature.

CASE REPORT

Case -1

18-year-old male patient reported to the surgery opd with chief complaint of swelling in the floor of mouth since last 6 months. Swelling was small initially and gradually progressed in size. There was no pain or any trauma in oral cavity. On examination, general condition was good and vitals were stable. General physical examination was normal. Extra oral examination revealed no palpable lymph node no other palpable neck swelling. Intraoral examination soft fluctuant swelling in anterior part of right side of floor of mouth, which extended floor of mouth, measuring 3/4/5 cm in diameter. The tongue was raised. All blood investigation were normal limits, chest x-ray was normal. Depending on examination patient was diagnosed ranula arising from sublingual duct. Patient was prepared for surgery and Marsupialization of the lesion was done under GA followed by suturing. Patient was placed on normal diet with 5 days antibiotics were

given. Post-operative follows up of 2 years showed no recurrence.

Figure 1: Intraoral ranula deep part.

Figure 2: Intraoral ranula.

Case-2

Figure 3: Intraoperative plunging ranula.

20-year-old male patient reported to surgery opd with chief complaint of swelling in the floor of the mouth and left submandibular region. The swelling had a sudden onset two week earlier no abnormality of the floor of the mouth, teeth or salivary gland was detected. On palpation soft, painless and fluid containing mass. The patient was in good health and no history of any systemic disorder. All blood investigation was normal. USG revealed on ovoidal neoformation in submandibular triangle measuring 3/2 cm. Color Doppler not reveal internal vascularization. Depending on examination patient was diagnosed Plunging ranula. Patient was prepared for surgery and excision of the mass was carried out under GA. It extended into sublingual space by crossing posterior border of mylohyoid muscle. The sublingual glandular tissue to which the cyst was adherent was totally removed by cervical approach. Cyst wall was resected completely. Minivac drain was kept insitu. Dressing was done. Post-operative follows up of 1 year showed no signs of recurrence.

Figure 4: Intraoral plunging ranula.

Figure 5: Prop plunging ranula.

Figure 6: Intraop plugging ranula.

Figure 7: Preop plunging ranula.

DISCUSSION

Ranula are the rare cystic mass in the neck and oral cavity that are essentially mucus retention psudocyst from obstructed sublingual gland.[7,8] Obstruction of duct due to trauma to floor of mouth or neck region may rupture the sublingual gland and cause obstruction of sublingual ducts clinically they are small. They also plunge by extending inferiorly beyond the free edge of the mylohyoid muscle or through a dehiscence of muscle itself. Clinical examination and histopathological examination and radiological examination give the diagnosis. Histopathological feature is the absence of epithelial tissue in the wall of cyst. Methods of treatment for ranula are several. Excision via an intraoral and cervical approach, marsupialization, intraoral excision of sublingual gland and drainage of lesion and excision of sublingual gland.[10] There are other treatments modalities co_2 laser has been used to treat. Intracystic injection of streptococcal preparation OK 432 it acts as sclerosing agent.[11] OK 432 increase absorption of saliva and decrease production of saliva.[11] Cryosurgical procedure is also try. Cryosurgical procedure is not satisfactory because the effect of freezing on the submandibular duct is also unknown. It can also cause injury to the lingual nerve and submandibular duct.[12] Marsupialization and excision of the cyst with or without removal of the submandibular gland almost always leads to recurrence of ranula.[13] In our case we did excision of sublingual gland and marsupialization and there is no recurrence of ranula. The most ideal treatment is therefore marsupialization for simple ranula and if it is plunging ranula than excision of sublingual gland also has to be done.

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