GIANT RECURRENT RANULA : IS NATURE RESPONSIBLE FOR RECURRENCE?

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ABSTRACT : *A case of giant recurrent ranula is reported in a 17 years young male. A methodical approach together with meticulous surgical technique resulted in a successful outcome.*

KEY WORDS : *Ranula, Cyst, Salivary glands, Recurrence.*

INTRODUCTION

Ranula denotes a mucus cyst which results due to obstruction or blockage of the duct of the sub-mandibular or sub-lingual gland in the floor of the mouth[1,2]. The cyst is filled with mucoid saliva secreted from the acini of salivary glands. This cystic swelling is smooth and rounded with a bluish tinge. It elevates the floor of the mouth and pushes the tongue aside, and can be easily seen on opening the mouth[2,3].

However, a giant ranula as reported in the literature, is a rare entity which may present as a swelling in front of the neck. These ranulas are rare, and need great surgical expertise and thorough anatomical knowledge for removal besides regular follow-up to detect recurrence.

CASE REPORT

A healthy young man, aged 17 years, presented with a diffuse cystic, non-tender swelling in front of the neck about 16 x 10 cms in size. He developed this swelling about three years back and had been operated thrice by different surgeons followed by recurrence within a few weeks of surgery (Figs. 1 & 2).

This swelling was clinically diagnosed as ranula and was operated upon by an elliptical incision[4]. During surgery we almost separated the cyst from the surrounding tissues, but at the end it got ruptured and about 300cc of mucoid material came out. The cyst was excised with its wall, which was extending into the left submandibular region. Redivac drain was kept and the wound closed in layers. Tissue was sent for histopathological examination and mucoid material for chemical anaylsis. Biopsy revealed multiple adipocytes with lining epithelium having mucus tubules capped by crescents of Giannuzzi. The chemical analysis confirmed the mucoid material to be salivary secretion.

Fig. 1. Pre-operative Photograph

Fig. 2. Pre-operative Photograph

Fig. 3. Post-operative Photograph

Fig. 4. Post-operative Photograph

This patient came back after 2 weeks with a swelling about one cm in diameter in the left submandibular region, which was excised and sent for histopathology. The biopsy report revealed that it as a portion of the submandibular gland. After 24 days of the second surgery the patient revisited with a swelling in the floor of the mouth which was marsupalized. It has been now more than 2 years and the patient is doing fine (Figs. 3 & 4).

DISCUSSION

Ranula usually present as a small cystic swelling in the floor of the mouth, but a giant ranula may present as a neck swelling[5]. The gross anatomy of submandibular and sublingual gland is extremely diverse[6] . The submandibular gland consists of two variable segments. One segment, comprising of 3 or 4 large lobules, occupies the major part of the submandibular triangle, postero-inferior to the free border of mylohyoid muscle. The second segment consists of variable groups of small glandular masses that differ in position and number and extend for a variable distance into the sublingual space lying above the mylohyoid muscle. This second segment usually makes contact or merges with the sublingual salivary gland. Likewise, sublingual gland also shows considerable anatomical complexity.

In this particular case, surgeons had tried to excise the submandibular gland, but because of its diverse anatomy, they were unable to excise it completely thereby leaving a portion behind, probably the sublingual part of the submandibular gland[7]. Thus, the extravasated saliva from the remanant of the salivary gland drained into the mouth initially, but later accumulated in the soft tissue to form a ranula due to obstruction of the duct by the fibrous connective tissue.

In conclusion, because of the diverse anatomy and fibrosis as a result of previous surgeries we were unable to excise the ranula with its source in our first attempt. However, because of regular followup the extension of the cyst in the left submandibular region was excised subsequently[4,8] while the ranula in the floor of mouth which developed later was marsupialized.

REFERENCES

1. Glickman I. Oral Cavity. In : Pathological Basis of Diseases, 3rd ed. 1994. p.894.

2. Norman L, Browns E. The Mouth. In : An introduction to the symptoms and signs of Surgical Disease, 2nd ed. London: Butler and Tanwer Ltd.; 1992. p.241.

3. Mann CV, Russell RCG, Williams NS, eds. The mouth, the cheek, the tongue. In : Bailey and Love's Short Practice of Surgery, 22nd ed. London: Chapman & Hall; 1995. p.440.

4. Yoshimura Y, Obara S, Kondah T, Naitoh S. A comparison of 3 methods used for treatment of ranula. J Oral Maxillofac Surg 1995; 53(3) : 280-2.

5. Barnard NA. The plunging ranula a bilateral presentation. Br J Oral Maxillofac Surg 1991; 29(2) : 112-113.

6. Leppi TJ. Ranula. J Deut Res 1967; 46 : 359.

7. Catone GA, Merrill RG, Henry FA. Ranula. J Oral Surg 1969; 27 : 774.

8. Ichimura K, Ohta Y, Tayama N. The surgical managment of the plunging ranula : a review of 7 cases. J Laryngol Otol 1996; 110(6) : 554-6.