Plunging Ranula : A Case Report  
SUSHMITHA K., KARTHIKA RAJEEV, CHETHANA C.S., SUDHIR M. NAIK

ABSTRACT

Ranula is a retention cyst of the sublingual gland, which enlarges progressively and extends into the surrounding soft tissues. Two variants have been described in the literature: simple oral ranula and the deep diving or plunging ranula. The plunging ranula has the potential to spread into deeper parapharyngeal spaces and presents a diagnostic dilemma due to its clinical similarity with other neck masses such as cystic hygroma, thyroglossal duct cyst, intramuscular hemangioma, cystic or neoplastic thyroid disease, branchial cyst. Here we are discussing about a case of plunging ranula in a 31 year old male patient, its clinical presentation, investigation and treatment.

Introduction

A ranula is a mucocoele which occurs in the floor of the mouth and is not an uncommon lesion. It is caused by spillage of mucin, usually from injury to the sublingual gland or to a minor salivary gland in the floor of the mouth. If, however, the mucus tracks through the mylohyoid muscle and produces swelling in the neck, the result is a plunging ranula.1

Fluid from the obstructed gland dissect between the fascial planes and muscles of the base of the tongue to the submandibular space.2

Case Report

A 31 year old male presented with complaints of swelling over the floor of mouth since 2 months and right side of submandibular region since 1 month. It was insidious in onset, gradually progressive.

He did not have any other symptoms. There was no history of trauma or fever.

On examination

Oral cavity - a 4 × 4cm soft, fluctuant, non-tender swelling was present over the floor of the mouth, crossing the midline and raising the tongue.

Neck examination - a 4 × 4 cm, smooth, diffuse, soft, fluctuant, non-tender, non-translucent swelling with well defined margins was seen in the right submandibular region.

Investigation

Patient underwent computed tomography neck with contrast, which showed well defined thick walled peripherally enhancing cystic mass lesion measuring 65 × 72 × 78 mm in the floor of the mouth in the sublingual space, causing splitting of the genioglossus muscle and extending into the body and base of the tongue. The lesion is displacing the tongue superiorly and posteriorly causing narrowing of the oralcavity and oropharynx. Posteriorly the lesion is related to the base of the tongue and causing narrowing of the hypopharynx. The lesion is in close proximity to the hyoid bone inferiorly. Inferiorly the lesion is related to the mylohyoid muscle. The lesion is displacing both the submandibular glands laterally (right-left). Anteriorly the lesion is related to the mandible.

Treatment and follow up-

Under general anaesthesia and patient lying in supine position with extension of neck. Area painted with betadine and draped. A vertical sublingual incision is placed over the mucosa of the swelling. Dissection done and cyst delineated from adjacent structures. Cavity opened by stab incision and around 60 ml of thick mucopus was drained. By digital palpation mylohyoid dent and CT findings were confirmed. Mucosal lining inside the cavity was scraped and excessive cyst wall excised. The edges of the cyst wall was sutured with floor of mouth using 4-0 prolene and marsupialization was done. Ribbon gauze soaked with antibiotic ointment was placed in the cavity. Postoperatively, Patient was advised oral hygiene. Ribbon gauze dressing was changed daily with progressive shortening of its length by 1 cm for 10 days. Suture removal done on the 10th day and patient was advised for follow up every week. Check ultrasonogram of neck was done after 3 weeks which showed that the previous cavity was filled with connective tissue and there was no collection. Patient was then advised follow up for every month since then and is asymptomatic so far.

Discussion

Ranula is a rare diseases and the frequency of affecting both the sex is reported to be more or less same. The prevalence of Ranula is reported in about 0.2% per 1000 persons.3