Iatrogenic infection in dermoid cysts of the floor of the mouth

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INTRODUCTION

Dermoid cysts are infrequent cystic tumors with an epidermal epithelium lining and structures such as hair follicles, sweat glands, and sebaceous glands. These cysts are considered true teratomas, and their origin may be congenital or acquired. The incidence is highest in male or female individuals aged from 15 to 35 years.

CASE REPORT

A female patients aged 34 years reported a progressive bilateral growth in the submentum and submandibular regions during the past 6 years. She added that it had worsened within the past seven days following needle aspiration biopsy in the floor of the mouth (Figure 1A). The physical examination revealed fever, dysphonia, dysphagia, and dyspnea. The patient was admitted into the hospital for surgical drainage through an intraoral approach; the drained material consisted of pus and a cyst containing hairs and a yellowish viscous material similar to keratin. A panoramic radiograph of the jaws revealed an extensive carious lesion with pulp involvement in unit 48, which suggested an odontogenic infection (Figure 1B). Ultrasound showed a well-defined regularly contoured ecogenic mass in the submentum, suggesting a cyst with viscous liquid content (Figure 1C).

The hypothesis was a dermoid cyst. Under general anesthesia, the cyst was encapsulated in an intraoral approach (Figure 1D). Histopathology confirmed the hypothesis (Figure 1E). The tumor has not recurred 1 year and 6 months after surgery (Figure 1F).

DISCUSSION

Dermoid cysts are generally asymptomatic slow-growing tumors of varying size. The anatomical site is critical for its clinical presentation. Lesions above the geniohyoid muscle may enlarge the sublingual region, while those below this muscle may enlarge the submental region and generate a double chin aspect1. In the present case, although the lesion was above the geniohyoid muscle, the initial infection and concomitant obesity of the patient resulted in a double chin, which made for an atypical presentation of a tumor located sublingually.

The differential diagnosis of dermoid cysts in the floor of the mouth is made with several other lesions, such as ramula, obstructed submandibular/sublingual ducts, thyroglossal duct cysts, odontogenic infection, benign and malignant tumors, and even excessive fat in the submental region. Besides the clinical evaluation, computed tomography, ultrasound, and biopsies may be used to clarify the diagnosis. Upon careful palpation, dermoid cysts fluctuate or feel similar to dough; ultrasound imaging adequately supplements the physical examination. Thus, aspiration biopsies, which are not recommended in the literature for the diagnosis of dermoid cysts, may be avoided, and may be considered an iatrogenic procedure in this situation. An altered physical status and the presence of postinfectious edema led to an initial diagnosis of odontogenic infection involving the primary fascial spaces.

Therapy consists of surgical removal of lesions, either extracutaneously or intracutaneously, depending on the site and number of tumors2,3. In the present case, removal was done through an intraoral approach as the lesion was located above the geniohyoid muscle.

REFERENCES


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