A Complication Following Tooth Extraction: Hypertrophic Clot.

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ABSTRACT

A 75-year-old woman was referred to the department of oral and maxillofacial surgery 10 days after the extraction of a symptomatic mandibular left second molar tooth, lamenting the presence of an esophytic neoformation to the post-extraction socket showing a diameter greater than 2.5 cm, which had occasionally encountered bleeding. The practice of exodontia occasionally results in complications from time to time. It is imperative for the clinician to recognize impending complications and manage them accordingly. The authors report this clinical case, showing the main complications after teeth extractions and the differential diagnosis of their clinical case.

Keywords: Complications, exodonthia, hypertrophic clot.

INTRODUCTION

Extraction of teeth is the most routinely performed oral surgical procedure.

Exodonthia, although programmed and performed by experienced operator, is not without complications.

Complications are unforeseen events that tend to increase the morbidity, above what would be expected from a particular operative procedure under normal circumstances.^[1]

The complications occurring after extractive surgery are divided into intra and post operatives.

Obviously to limit the complications it's imperative to perform with attention, both the diagnostic phase to identify the difficulties and to improve programming, both the surgical phase to limit tissues trauma.

Intra operatives complications are fractured tooth, laceration and soft tissue injury, luxation of adjacent tooth/teeth, fracture of cortical plates, fracture of maxillary tuberosity, fracture of mandible, displacement of tooth/root in the maxillary antrum, displacement of tooth/root into adjacent tissue space.

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Turin, Italy, Chief M.Giordano Post operatives complications may be infection, haemorrhage, Dry socket, Trismus, Postoperative pain

Wound dehiscence, and rarely the formation of an hypertrophic clot or hematoma. [2]

CASE REPORT

A 75-year-old healthy woman was referred to our department with the main complaint of a big exophytic lesion appeared slowly 10 days after the extraction of the mandibular second left molar.

The patient referred that had assumed some FANS to control the pain after the extraction

The lesion was disomogeneous in colour, soft, 2.5 in diameter and height and occasionally it underwent to bleeding.

The surgeon decided for the excision of the lesion using electrosurgical, and cleaning of the socket after local anaesthesia, and using resorbable suture.

The anatomical piece was sent to the pathologist, whose diagnosis deposed for hypertrophic clot.

In particular the pathologist described Fibrinoid-hematic material in relation to bacteria also actinomyces type, granulation tissue and exudate material. After the surgery the patient healed normally.

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Figure 1: Intraoral Esophitic Neoformation Showing A Diameter Greater Than 2.5 Cm.

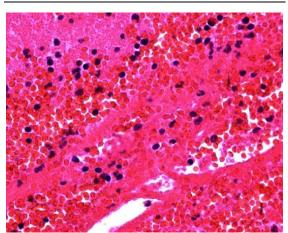


Figure 2: Histological examination: number of red bllod cells, fibrine tricks, and some lymphocytes.

DISCUSSION

The post extractive socket sees some standard phases that take to the healing of the bone and soft tissue. The removal of tooth induces inflammation, epithelization, fibroplasia, and remodeling. When a tooth is extracted, the socket fills with blood that clots and seals off the socket from the oral environment. The 1st week of healing is characterized by inflammatory stage. Blood cells enter the socket to remove contaminating bacteria from the socket. During 1st week, there is growth of fibroblasts and capillaries. The epithelium migrates down the socket wall until it encounters the bed of granulation tissue. At the end of 1st week, osteoclasts survive along the crest of alveolar bone surrounding the socket. The 2nd week is potentiated by the large amount of granulation tissue that fills the socket. Collection of osteoid cells takes place along the alveolar bone proper in the socket. The process starts during the 2nd week and continues till the 3rd and 4th weeks of healing process and epithelization of most of the socket gets completed till this time. There is continuous resorption of cortical bone from the crest and walls of the socket and new trabecular bone is formed down across the socket. Normally, extraction sockets heal uneventfully with bony tissue within 1–2 months after extraction. This healing process leads to reduction of the original height and width of the alveolar bone proper.^[3]

The hypertrophic coagulum is a rare condition observed after a dental extraction, above all so great in size.

The oral cavity and jaws can be the location of many diseases including exophytic lesions with a prevalence of 25.8%,^[4] which may arise from osseous (central) or extraosseous (peripheral) tissues. The term exophytic lesion means any pathologic growth that projects above the normal contours of the oral surface.^[5]

The differential diagnosis for this rapidly growing exophytic soft tissue mass included was set with pyogenic granuloma, pre-existing primary gingival squamous cell carcinoma, non-Hodgkin lymphoma. Pyogenic granuloma is a type of inflammatory hyperplasia that appears as an over exuberant connective tissue response to a stimulus or injury. [6] It usually develops as a response to local injury or chronic irritants like calculus, foreign bodies or chronic biting of soft tissues. It is a special type of hyperplasia which inflammatory in granulomatous stage appears dark red, is asymptomatic, soft and spongy on palpation and bleeds easily. The lesion is generally an elevated, pedunculated, or sessile mass with a smooth, lobulated surface which might become ulcerated, and can be enveloped by yellow-tan fibrinous exudates.[7,8]

Clinical presentation of an oral SCC, particularly in the early stage, can mimic common conditions of the oral cavity. These patients can present with an array of non-specific signs and symptoms to health professionals, which can make clinical diagnosis difficult: wide range of clinical signs and symptoms, including pain, swelling, ulceration, mobile teeth and bleeding. These also occur in common non-neoplastic conditions of the oral cavity such as periodontal disease and dental abscesses.

Oral SCC can sometimes be difficult to diagnose, which can result in more extensive treatment and greater morbidity. Health professionals and patients need to be aware that non-healing oral lesions, even after dental treatment such as a dental extraction, need to be considered as suspicious and an appropriate surgical referral should be made. [9]

The most common primary tumor metastasis to the oral cavity is from the lung, kidney, liver, prostate, and colorectal cancers. The metastatic lesions are similar to oral lesions such as pyogenic granuloma, giant cell lesions, gingival polyps, hemangioma, peripheral fibroma, and adenoid squamous cell

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carcinoma. Therefore, the diagnosis of primary tumors is challenging. ^[10]

Lymphomas are divided into two main groups-Hodgkin and non-Hodgkin lymphomas. Hodgkin lymphoma (HL) commonly manifested as nodal involvement, while 40% of non-Hodgkin lymphomas (NHL) are extra-nodal.[11] The head and neck area, particularly Waldeyer's tonsillar ring (tonsils, pharynx and base of the tongue) are among the most commonly involved extra-nodal sites.[12] The prevalence of NHL increases from the 5th to 7th decades of life and has a predilection for males. The most common clinical manifestation includes local swelling with or ulceration.[13]

CONCLUSION

The exophytic oral lesion may range over may kind of diseases, simply post-operative complications like an exuberant clot or may be malign manifestation like tumour miming benign lesions like pyogenic granuloma.

The microscopic examination performed by the pathologist it's mandatory to have the diagnosis of certainty, that makes the difference for the patient's health.

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