**Odontogenic Myxoma**  
By: Daysi Chicaiza  
Oral Pathology 2017  
Section: Thursday AM

**Overview**  
Odontogenic Myxoma is a rare (3%-6%) but aggressive benign odontogenic tumor. It occurs on both jaws with a higher prevalence on the posterior region of the mandible. It is considered to be locally aggressive, expansible and non-capsulated therefore it has a high recurrence rate.

**Etiology**  
Odontogenic Myxoma originates from the mesenchymal tooth buds (dental follicle, papilla and periodontal ligament) causing missing or unerupted teeth.

**Clinical Presentation**  
Upon extra oral examination Odontogenic Myxoma presents as asymptomatic swelling of the face most commonly involving the inferior border of the mandible. Upon palpating this tumor is firm and non-tender. It could cause loosening of teeth due to its bone expansion nature. There are no changes on the skin where tumor is observed.

**Demographic**  
Odontogenic Myxoma can happen on both jaws but has a higher predilection on the mandible than maxilla at a 66%: 33% ratio. This tumor affects mostly women than men at a 2:1 ratio. Frequently affecting them in their 20-30 year of age. Rarely occurring in 10-year-old children and women on their 50 years of age or over. No race predilection.

**Biopsy / Histology / Radiographs**  
To confirm diagnosis incisional biopsies, need to be performed. Histologically Odontogenic Myxoma consists myoxid stroma with a network of collagen fibers, loosely arranged spindle shaped and stellate cells with small round nuclei and scant cytoplasm. Radiographically Odontogenic Myxoma can be observed as both small unilocular or large multilocular radiolucencies. Typically found to be multilocular and rarely to be unilocular. Unilocular lesions exhibit odontogenic cysts and unilocular ameloblastoma. Multilocular lesions exhibits as soap bubble, honey comb pattern, or tennis racket radioluncencies. Large multilocular lesions can exhibit the radiographic sun ray pattern like an osteosarcoma. Radiographic root resorption may be observed.

**Differential Diagnosis**  
Odontogenic Myxoma can be show similar features to an ameloblastoma, odontogenic fibroma, central hemangioma, central giant cell granuloma, chondromyxoid fibroma, rhabdomyosarcoma, dentigerous cyst, OKC and unicystic calcifying epithelial odontogenic tumor.

**Treatment**  
Depending on the size of the tumor different treatment options may be considered. Multiple conservative curettages or enucleations may be performed rather than radical surgeries. However, complete removal with conservative surgery may be difficult due to its un-encapsulated nature. Radical surgery consists of segmental resection and partial or total maxillectomy or mandibulectomy. Followed by facial reconstruction due to the large bone removal to prevent recurrence.

**Prognosis**  
Patient needs to present to multiple follow ups due to Odontogenic Myxoma recurrence within 18 months after surgery. The main cause of recurrence is the incomplete removal of the tumor. Therefore, the lesion should be excised with extra1.5cm healthy bone margins. Recurrence rate of 10–33% has been reported when the tumor boundaries are poorly defined.

**Professional Relevance**  
Dental Hygienists should be able to make an empirical diagnosis based on clinical and radiographic findings upon extra/intra oral examinations. Many patients would not a be aware that the might have an odontogenic lesion growing since some of these lesions are asymptomatic. Some of these lesions can cause tooth mobility or tooth loss and affect patient’s oral health. Early detection can prevent progression of any disease. More importantly we can save someone’s life since some of these lesions might turn out to be cancerous.

**Bibliography**  
Gupta, S., Grover, N., Kadam, A., Gupta, S., Sah, K., & Sunitha, J. D. (2013). Odontogenic myxoma. *National Journal of Maxillofacial Surgery*, *4*(1), 81–83. <http://doi.org/10.4103/0975-5950.117879>

Ram, H., Mehta, G., Kumar, M., & Lone, P. (2014). Odontogenic myxoma in a 52-year-old woman. *BMJ Case Reports*, *2014*, bcr2013202416. <http://doi.org/10.1136/bcr-2013-202416>

Ayranci, F., Omezli, M., Rastgeldi, O., & Duman, A. (2015). Odontogenic Myxoma Located in The Mandible. A Case Report, 2015. <http://dergipark.gov.tr/download/article-file/182538>

Nehete, A., Singh, J., Mehta, R., Desai, R., Bansal, S., Shirsat, P. (2016). Odontogenic Myxoma of the Maxilla: A Rare Case Report. Open Journal of Clinical and Medical Case Reports, 2016. <http://jclinmedcasereports.com/articles/OJCMCR-1160>