

INFORMATION SHEET – AMELOBLASTOMAS

Ameloblastomas are jaw tumors, which form from the tissue which makes up the enamel of teeth. They are not cancer, but **benign lesions**, yet aggressive and invasive. If not treated completely these tumors may reoccur. Many times the tumors “hollow out” the jaw and may cause jaw fractures.

Location: Most occur in the lower jaw. Many times, they are associated with impacted teeth. They are slow-growing, rarely painful, and may cause expansion of the jaw and an apparent facial enlargement.

On X-ray: Ameloblastomas appear as gray lesions on x-ray with a white border. They are usually associated with impacted wisdom teeth.

Treatment: Ameloblastomas which are central in the jaws are either unicystic (one cyst), or multicystic (many cysts).

Unicystic lesions may usually be treated by aggressive removal of the tumor (curettage) and suspected bony involvement. Many times the peripheral bone can be left intact. The risk of jaw fracture is very high and healing is unpredictable. We, therefore, prefer to bone graft these lesions taking bone from the hip or using Infuse (a protein that regenerates bone).

Multilocular lesions are treated by removing (resecting) the entire tumor plus 1.5 cm (over one-half inch) of adjacent bone. This is because the tumors invade past where you see it on x-ray). When resections are needed, a titanium bone plate is applied to the bone ends to stabilize them during healing.

Staging: Treatment of ameloblastomas is performed in several stages:

- 1) **Biopsy:** This is done to firmly diagnose the lesion. These lesions may also be cysts.
- 2) **Tumor removal:** This is usually done in the hospital and may require a bone plate to be applied. These are usually performed using incisions in the mouth. Incisions on the face may be necessary to help with surgical access.

3) **Reconstruction:** This is performed in the hospital and usually uses an incision in the lower neck for access. Bone grafts are taken from the hip and packed around the bone plate to cause the new jaw bone to grow. This is usually done 3 months after tumor removal. Some pediatric patients will regenerate the entire cyst defect during growth. In certain pediatric patients is advisable to remove all bone plates as soon as the new jaw bone has formed. This prevents the bone plates from restricting growth.

4) **Dental Implants:** Placing dental implants into the new jaw bone is vitally important for maintaining the jaw bone. We have seen the jaw shrink (resorb) if implants are not placed following bony reconstruction. This may be done 4-6 months after bony reconstruction.

Insurance Coverage: Most of the procedures, including all hospitalizations are covered by medical insurance. Intraoral biopsies and tooth removal is covered by dental insurance. Typically most insurance companies **do not** cover dental implant surgery. They may cover the dental procedures necessary to fabricate new teeth.

Notes: Many oral and maxillofacial surgeons will not treat these lesions due to the necessity of having an assistant surgeon and the long treatment time involved. Plastic Surgeons and Ear Nose and Throat surgeons have little or no experience with treating these lesions and the dental implant reconstruction. Dr. Schmitz has extensive experience with treating and reconstructing these tumors as well as in managing pediatric maxillofacial tumors.