

CASE OF THE MONTH (May 2007)

Signalment and History:

An eight month old spayed female Siberian Husky presented with a history of a large oral mass located apical to the right maxillary canine tooth (104). This mass had been present for only a few weeks, but was growing rapidly. Our initial procedure was an incisional biopsy to determine the cell type and expected behavior of this mass. The histopathology results indicated squamous cell carcinoma.

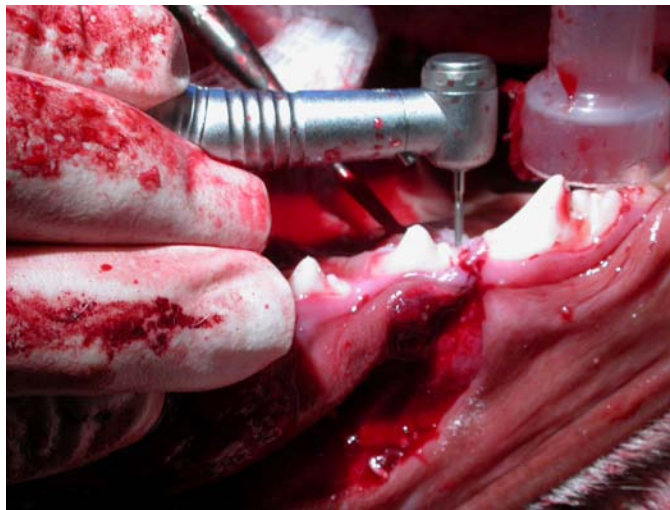


Complete blood count, blood chemistry, and thoracic radiographic studies were normal. CT imaging was also done in order to delineate the extent of the mass and to dictate the necessary surgical margins.

Procedure: The CT scan indicated that the mass had extended into the maxillary bone, but did not invade into the nasal cavity. Therefore we felt that a partial rostral maxillectomy was indicated and should achieve good results. A magic marker was used to outline the margins for our soft tissue incisions in the buccal and palatal mucosa. Our goal was to achieve margins of 1.5 cm.



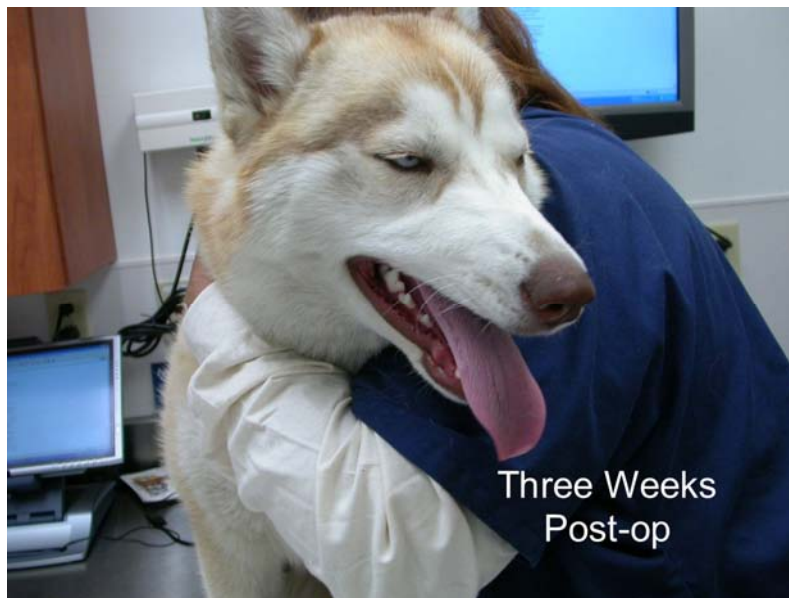
The rostral extent of the incision ran between the right maxillary first and second incisors. The caudal extent of the incision was between the right maxillary third and fourth premolars. After creating the soft tissue incisions around the periphery of the mass, we used a high speed dental drill with a Lindemann bone bur to drill a line of holes into the underlying bone with a spacing interval of 3-4 mm. This line generally followed the direction of the soft tissue incision. Next a mallet and chisel were used to “connect the dots” and cause a complete separation of the bone along this line.



After this “en bloc” resection was complete, the maxillary buccal mucosa and the palatal mucosa were elevated and their respective underlying periosteum was dissected to enhance the elasticity of the flap. Closure was accomplished with two layers of 3-0 PDS. Histopathological evaluation of the “en bloc” resection indicated that clean margins had been attained. The patient had a voracious appetite the next morning, and continues to do very well over two years later.



Discussion: One of the take home points in this case is the importance of performing a biopsy of an oral mass regardless of the age of the patient. Obviously, neoplasia is more prevalent in older patients, but it is certainly not unheard of in younger ones. The second point is that it is important to treat oral masses in two stages. The first procedure should consist of an incisional biopsy in order to obtain an accurate diagnosis. Armed with this vital information, we can then formulate a definitive treatment that will be most effective in treating the specific disorder.



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