Canine Acanthomatous Ameloblastoma (CAA) is the 4th most common oral tumor in dogs. It is a benign epulis/odontogenic tumor that frequently invades bone. Oral tumors can be difficult to observe, most patients will have presented to their veterinarian with a secondary complaint, such as halitosis, excessive drooling, weight loss, difficulty eating, and bleeding from the mouth. If left untreated it can/will continue to destroy bone and eventually interfere with quality of life. AA is a rapidly progressive and locally invasive tumor, however; they do not metastasize. Median age for diagnosis is 9-10 years, and breeds that are predisposed include Golden Retriever, Akitas, Cocker Spaniel and Shetland Sheepdog.

Initially a biopsy is performed to confirm the tumor type and will allow our doctors to make the appropriate treatment recommendations. Dental radiographs will determine if bone invasion has occurred. Pre-operative chest radiographs, computed tomography (CT) and/or magnetic resonance imaging (MRI) may also be recommended to ensure no metastasis of another tumor type.

Surgical excision is the treatment of choice for CAA. Since this tumor is usually invasive it may require wide margins to be taken. More tissue and bone should be excised to help prevent any reoccurrence; part of the upper or lower jaw may need to be surgically removed. Radiation therapy is another option for treatment on patients where the tumor is inoperable. It may also be used as a secondary option if the tumor could not be completely excised with clean surgical margins.

Surgery is considered curative, with a reoccurrence rate of 5% in dogs following a mandibulectomy or maxillectomy. Radiation therapy can be considered for complete or partial responses in some cases. In a study where dogs were given 12 treatments throughout a four week period, at 3 years 80% of the dogs were alive and no further progression of the tumor. Radiation reoccurrence was reported in 8-18% of dogs.