ORAL FIBROSARCOMA

Biologic Behavior
• oral FSA is the 3rd most common canine oral tumor with an incidence of 7.5%-25.0%
• median age 7.3-8.6 years, but 25% dogs are < 5 years
• sex predisposition: ± male with a male-to-female ratio of 1.4-2.8:1
• site predilection: gingiva (usually on maxillary arcade between the canine and carnassial teeth) (56%-87%), hard palate (7%-17%), and buccal or labial mucosa (4%-22%)
• gross appearance: flat, firm, ulcerated, multilobulated, and deeply attached
• locally invasive into the gingiva and bone with local tumor recurrence after surgical excision common
• 60%-65% dogs have radiographic evidence of bone involvement
• metastasis to the regional lymph node in 19%-22% and lungs in 6%-27% dogs

Treatment
• surgical techniques: mandibulectomy and maxillectomy
• FSA is poorly responsive to radiation therapy and chemotherapy
• radiation therapy can be used alone or in combination with surgical excision, but is considered palliative
• no known effective chemotherapeutic agent, but doxorubicin and piroxicam may have some effect

Prognosis
• local control is more important than metastatic disease with local recurrence the most common cause of death
• high-grade anaplastic oral FSA have a higher metastatic potential than low-grade FSA
• MST for both mandibular and maxillary oral FSA following surgical resection: 11 months with 12-month survival rate 25%-40% and local recurrence rate 46%
• MST following mandibulectomy: 10-12 months with 12-month survival rate 50% and local recurrence rate 10%
• MST following maxillectomy: 11-12 months with 12-month survival rate 21% and local recurrence rate 33%
• radiation therapy: MST 6-26 months
• radiation therapy and hyperthermia: 12-month survival rate 50%
HISTOLOGICALLY LOW-GRADE BUT BIOLOGICALLY HIGH-GRADE FIBROSARCOMA

Biologic Behaviour
• histologically low-grade but biologically high-grade FSA occurs predominantly in
  the maxilla (72%) of large breed dogs, especially Golden Retrievers (54%)
• histological appearance is benign (i.e., fibroblast proliferation with abundant
  production of collagen) and can often be interpreted as fibroma or low-
  grade FSA
• 72% dogs have radiographic evidence of bone lysis
• metastasis to the regional lymph node in 20% and lungs in 12% dogs

Treatment
• surgical treatment: mandibulectomy and maxillectomy
• radiation therapy can be used alone or in combination with surgical excision, but
  is considered palliative
• no known effective chemotherapeutic agent, but doxorubicin and piroxicam may
  have some effect

Prognosis
• survival depends on early diagnosis and aggressive treatment
• prolonged survival times can be achieved with surgery, surgery and radiation
  therapy, radiation therapy alone, and radiation therapy and hyperthermia

FSA - fibrosarcoma
MST - mean survival time