

## BASIC INFORMATION

### Description

An epulis is a small, rounded tumor found in the mouth of dogs at the edge of the gum line (the gingiva). These tumors arise from the tissues that hold the teeth in place. In some cases, the epulis can cause the teeth to change position, making it more difficult for the dog to eat. Most epulides are slow growing and may be present for several months before detection.

There are three main types of epulis, based on their manner of growth and the tissues involved:

- The most common types are the *fibromatous* and *ossifying* epulides. The ossifying epulis has areas of bone or tooth enamel within it. The fibromatous type contains bundles of connective tissue collagen.
- The rarest form, and the most worrisome, is the *acanthomatous* or squamous epulis. This type is able to invade the bone of the jaw and can lead to significant damage of the bones of the face or lower jaw if not treated appropriately and early.

Although an epulis is a type of tumor, it is usually benign. The acanthomatous type of epulis very rarely metastasizes (spreads to other parts of the body). Most commonly, this epulis invades the nearby bone.

### Causes

There is no known cause of epulis in dogs. Some breeds, particularly the brachycephalic breeds (those with very short snouts, such as the pug, boxer, and English bulldog), seem to develop epulides more commonly, but the reason for this is unknown.

### Clinical Signs

A very large epulis can affect eating. You may notice that the dog has trouble picking up food, drops food while chewing, or has trouble swallowing. Some dogs drool or have halitosis (bad-smelling breath) if the epulis becomes damaged and infected, or food particles become stuck in the epulis. A large epulis can also lead to distortion of the face and abnormal deviation of the teeth. If the epulis is damaged during chewing, blood may be seen on the lips or in food or water bowls.

Often, an epulis is only detected during a physical examination when your veterinarian checks the condition of the teeth and gums.

### Diagnostic Tests

Diagnosis of an epulis is often made from the physical examination, based on observing a characteristic small tumor. Other

forms of cancer in the mouth (such as oral melanoma and squamous cell carcinoma) are more worrisome than most forms of epulis, and tests may be needed to differentiate them from acanthomatous epulis. Your veterinarian may recommend x-rays or computed tomography (CT scan) of the jaw and skull, collecting cells from the tumor for examination under the microscope, or biopsy of the mass (which usually requires general anesthesia and surgery).

## TREATMENT AND FOLLOW-UP

### Treatment Options

Surgical removal of the epulis is the treatment most commonly recommended. It may involve the extraction of affected teeth as well. Failure to remove all of the affected tissue can allow the tumor to grow back. If the epulis is very large, especially if it is an acanthomatous epulis, large sections of jaw bone and multiple teeth may be extracted to improve the chance of a cure. In cases with invasion of the bone requiring extensive reconstructive surgery, your veterinarian may recommend referral to a surgery or oncology specialist.

Epulides are not usually responsive to chemotherapy. Radiation therapy is sometimes recommended for large acanthomatous epulides.

### Follow-up Care

Most dogs recover from surgery for removal of an epulis rapidly and are soon back to normal. Sutures placed in the mouth may dissolve on their own over several weeks to months. After surgery, your dog's mouth may be tender, and its appetite may be reduced for 2-3 days. Dogs having major surgery for removal of a very large epulis or acanthomatous epulis may need to be hospitalized for several days, given medications for pain, and fed through a tube to allow the surgical wounds to heal.

### Prognosis

The prognosis for a cure following removal of a fibromatous or ossifying epulis is good, as long as an adequate amount of tissue is removed. The prognosis for an acanthomatous epulis is more guarded (uncertain), because the chance of a surgical cure depends on the size of the tumor, amount of bony invasion, location within the mouth, and the skill of the surgeon carrying out the procedure.