

BASIC INFORMATION

Description

Entropion is inward rolling of the eyelid and may involve part or all of one or more eyelids. Entropion may be inherited and develop soon after birth, or it may be acquired.

Causes

Inherited entropion occurs in many different breeds of dogs, including the mastiff, American bulldog, Chinese shar-pei, Great Dane, Doberman pinscher, Labrador retriever, Rottweiler, Saint Bernard, boxer, and others. Because of their excessive facial folds, entropion may develop in shar-pei puppies soon after their eyelids open. In other breeds, the condition becomes obvious over several weeks to months.

Acquired entropion may develop following inflammation, trauma, or chronic eye pain. Acquired entropion is more common in the cat and may arise after ocular infection with feline herpesvirus. Some forms of eye pain cause spastic entropion, which often resolves when the pain subsides.

Clinical Signs

Clinical signs are quite variable and may include mild tearing, squinting and blinking, and production of large amounts of thick discharge. Some animals find it hard to keep their eyes open and may paw or rub at the eyes. The eye may be red, and the cornea may be ulcerated, inflamed, and cloudy. In shar-pei puppies, the eyes may barely be visible.

Diagnostic Tests

Entropion can usually be diagnosed by close examination of the eyelids, before and after local anesthetic drops are applied to the eye. The cornea may be stained with fluorescein to determine whether an ulcer is present.

TREATMENT AND FOLLOW-UP

Treatment Options

Temporary tacking can be performed for entropion in very young puppies. Sutures or staples are placed in the skin above and/or

below the eyelids and pulled tight enough to cause the eyelids to roll out. This procedure allows time for the puppy to grow into the facial skin and may prevent the need for permanent entropion surgery. Temporary tacking is also occasionally used for spastic entropion and in animals that cannot undergo general anesthesia.

Spastic entropion usually resolves once the underlying problem has been corrected. Ocular ointments and a soft contact lens may be applied to protect the cornea until the problem resolves.

Most other cases of entropion require permanent corrective surgery. Simple entropion is often corrected by making parallel elliptical incisions in the skin of the affected portion of lid. The skin between the incisions is removed, and when the defect is sutured closed, the eyelid rolls outward. Other surgical techniques may be used if entropion affects the inner or outer corners of the lids or is accompanied by excessive lid length, ectropion, or other defects. In Chinese shar-pei and chow chow dogs that have persistent, excessive skin folds of the forehead, a permanent brow-tacking procedure may be considered after the dog is fully grown.

Follow-up Care

Temporary tacking sutures are sometimes removed by the mother dog as she cleans the puppies' faces, or they may fall out on their own. If the sutures are retained, they may be removed in 2-3 weeks.

Following permanent corrective surgery, an Elizabethan collar is often applied to prevent trauma to the suture line. Topical antibiotics may also be applied to both eyes, and sutures are usually removed in 10-14 days.

Prognosis

Simple entropion is often corrected with one surgery, and clinical signs usually resolve quickly. Complicated entropion may require more than one surgery or may be treated with staged surgeries, with two techniques performed several weeks or months apart.