



1N303 LaFox Rd, La Fox, IL 60147
FVEP@foxvalleyequine.com

(630) 365-5600

Progressive Ethmoid Hematoma

Definition

Progressive ethmoid hematoma (PEH) is a mass of the nasal passages or sinuses. These masses form as an aberrant vasoproliferative response (proliferation of blood vessels) within the nasal or sinus mucosa. While locally destructive, meaning the mass can invade and damage normal tissue, it is technically benign (non-cancerous). Of horses with nasal cavity or sinus disease, horses with PEH's make up 4%. Thoroughbreds and horses between the ages of five and nine years old tend to be more commonly affected. The etiology, or cause, of PEH's is unknown.

Clinical Signs

The most common clinical sign of a PEH is mild, intermittent, unilateral (coming from one nostril) epistaxis (bloody nasal discharge). Nasal discharge from only one nostril is more suggestive of disease of the nasal cavity or sinuses due to the anatomical location of the nasal septum dividing the right and left nostrils. Disease of the pharynx, guttural pouches, and lungs typically results in nasal discharge from both nostrils as the discharge in these cases originates behind the caudal-most extent of the nasal septum. Depending on the mass's location in the sinuses or nasal cavity, stertorous, or noisy breathing, may be heard due to reduced airflow through the affected nasal passage. The bleeding may occur spontaneously or with exercise.

Diagnosis

Diagnosis is made with a combination of a thorough history, clinical signs, radiographs, endoscopy, and imaging such as a CT or MRI. Histopathology of the mass is required to make a definitive diagnosis. This is accomplished by sending a portion of the mass to a pathologist for microscopic examination.

Treatment

Surgical removal is the treatment of choice. This is accomplished by making a frontonasal bone flap, where a segment of bone on the front of the horse's face is retracted back to allow access to the affected sinus. Cryosurgery (freezing tissue) can be used in addition to surgery to decrease recurrence rates. Endoscopic laser excision or intralesional formalin injection are other treatment options as well. Masses only injected with formalin typically regress but commonly recur.

Prognosis

Without treatment, ethmoid hematomas progressively enlarge, thus, treatment is highly recommended. In horses who undergo surgical removal, recurrence rates remain 30-60% from 3 months to 3.5 years post-op. Recurrence can occur due to incomplete excision and regrowth or growth of a new lesion. Regular endoscopic exams every six months are recommended for five years after surgical removal to monitor for and to treat any recurrence.