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RETROBULBAR DERMOID CYST IN AN 18-YEAR OLD HORSE

Introduction

Retrobulbar swelling in the horse has multiple differential diagnoses such as retrobulbar or orbital neoplasia, orbital cellulitis, abscess, sinus cyst, hydatid cyst, myositis of the extraocular or masticatory muscles, retrobulbar haematoma, zygomatic salivary gland mucocele or congenital malformations³. Congenital malformations such as dermoid cysts are considered uncommon in the horse⁴. The most common localization of dermoid cysts are at the base of the ear (dentigerous cysts) or in the false nostril (atheromas)^{1,2}. Other localizations have been described as well^{1,2}. This case report describes a retrobulbar dermoid cyst with an extension into the frontal sinus in an 18-year old pony.

Case description

An 18-year old NRPS pony gelding was evaluated for a retrobulbar swelling cranial to the left eye. The pony was referred to the Equine Clinic because the owner noticed an asymmetry of the skull. The primary veterinarian performed ultrasound, culture and cytology. This did not give a definitive diagnosis.

Clinical findings

Physical and ophthalmic examination did not show any abnormalities except for a fluctuating mass in the retrobulbar space of the left eye. The swelling could be palpated without evoking a painful reaction. Computed Tomography revealed a mass with a well-defined lining that extended into the frontal sinus. The left eye also showed mild lateral displacement. The definitive diagnosis was made based on histological examination.

Treatment and outcome

Surgical excision of the cyst was performed through a retrobulbar approach and a bone flap in the frontal sinus. The cystic wall was completely removed. No recurrence has appeared 4 months after surgery.

Conclusion

Depending on the location, growth rate and invasive character of the dermoid cyst surgical removal is considered a good treatment option. In order to make a definitive diagnosis diagnostic imaging and histologic examination are essential.

References

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