

## Introduction

Guttural pouch mycosis is a rare disease characterized by fungal plaques that develop within the guttural pouches of horses. *Aspergillus* spp. are by far the most common fungi isolated from guttural pouches affected by mycotic infection. An 8-year-old anglo-european gelding was referred to the Equine Clinic of Liege's University to investigate bilateral mucopurulent nasal discharge. Extensive bilateral guttural pouch mycosis was diagnosed and *Trichophyton equinum* was isolated from a diphteric plaque sample. From the authors' knowledge, this is the first documented clinical case in which *Trichophyton equinum* was referred as a causative agent of guttural pouch mycosis.

## Objectives

To present a novel agent of guttural pouch mycosis and the severity of lysis associated to it.

## Methods

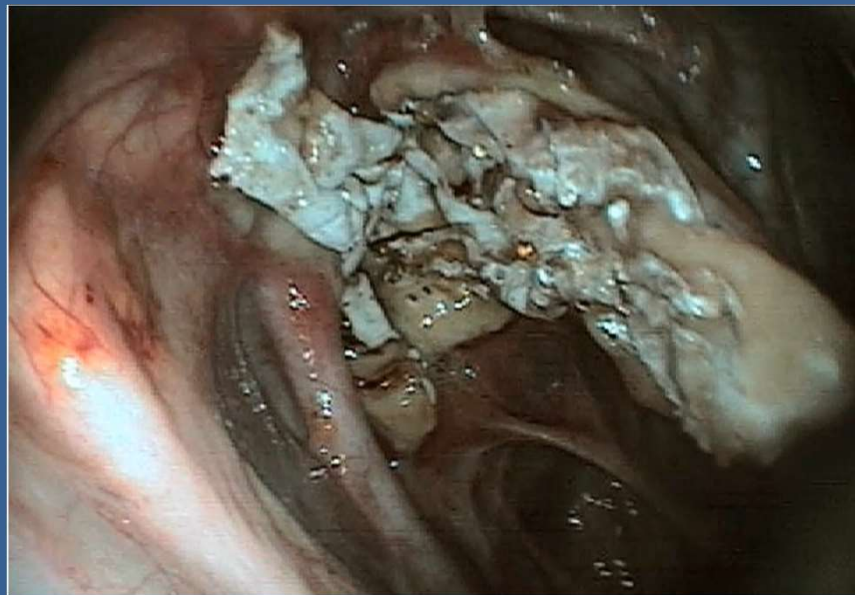
Extensive bilateral guttural pouch mycosis was diagnosed after endoscopic and cytological examination of guttural pouch material. *Trichophyton equinum* was isolated from a diphteric plaque sample using Sabouraud's dextrose agar. The horse was treated with repeated guttural pouch debridement and topical enilconazole (1% solution into 0,9% sodium chloride infused on the plaque). To minimize hemorrhagic risk, an arterial embolization was successfully performed confirmed by an angiogram.

## Results

A few weeks later, the horse was presented again to the equine hospital for severe epistaxis and central nervous system deficits, and it was euthanized because of poor prognosis.

**Fig. 1.**

**Endoscopic view demonstrating a mycotic plaque principally localized in the medial part of the left guttural pouch.**



## Conclusion

Necropsy revealed progression of the infection to the point of lysing the septum and both ostia of the pouches. Origin of the bleeding was not identified but could have been caused by neovascularization or aberrant vascularization.

From the authors' knowledge, this is the first documented clinical case in which *Trichophyton equinum* was isolated as the causative agent of guttural pouch mycosis.

## Bibliography

- Dobesova O, Schwarz B, Velde K, et al. Guttural pouch mycosis in horses: a retrospective study of 28 cases. *Vet. Rec.* 2012;171(22):561.
- Freeman DE. Update on disorders and treatment of the guttural pouch. *Vet Clin North Am Equine Pract.* 2015;31:63–89.
- Lepage OM, Perron MF, Cador JL. The mystery of fungal infection in the guttural pouches. *Vet J.* 2004;168(1):60–4.
- Lepage OM, Piccot-Crézollet C. Transarterial coil embolisation in 31 horses (1999–2002) with guttural pouch mycosis: a 2-year follow-up. *Equine Vet. J.* 2005;37(5):430–4.
- Ludwig A, Gatineau S, Reynaud MC, et al. Fungal isolation and identification in 21 cases of guttural pouch mycosis in horses (1998–2002). *Vet J.* 2005;169:457–461.
- Pollock PJ. Diagnosis and management of guttural pouch mycosis *Equine Vet. Educ.* 2007;19(10):522–527.