



### Case series of gastric squamous cell carcinoma in the horse: 6 cases

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#### Introduction

Gastric squamous cell carcinoma (GSCC) is a rare, uncommonly reported and highly metastatic tumor which diagnosis relies on histologic examination. Early diagnosis remains challenging due to the late non-specific clinical signs.

The purpose of this study was to describe the clinical presentation, ancillary exams, post-mortem examination, histopathological findings and outcome of GSCC.

#### Material and methods

A retrospective study of equids admitted in the E.C.V.U.L. between 2009 and 2018 was conducted. All cases for which an ante-mortem or post-mortem final histologic diagnosis of GSCC were included.

#### Results

Six cases were included. Median age was 18.5 year-old (15-22). Reason for presentation was weight loss (83%), choke (33%), fever (33%) and chronic diarrhea (17%). Median symptoms duration was 2 months (0.5 to 6).

On admission, all cases were depressed and tachypneic. Tachycardia (50%), fever and edema (33%) were common, as hypersalivation (50%) and halitosis (33%). Hypoalbuminemia and anemia were the most frequent blood abnormalities. Rectal palpation was abnormal even if no mass was palpated (50%). Neoplastic cells were cytologically detected in the peritoneal fluid in one case. Gastroscopy allowed direct visualization of the mass\*, but in half the cases, the stomach could not be reached because of an esophageal mass. A thickened stomach wall (33%), a gastric mass (17%), splenic and hepatic masses (33%) were noticed on abdominal ultrasonography (AUS)\*\*. Ante-mortem histologic diagnosis on biopsies was achieved in 50% of cases. Short-term survival rate was 17%. In necropsied cases, all presented metastasis\*\*\*.

#### Discussion and conclusion

GSCC is invariably fatal and affects the elderly. Compared to the literature (31 cases over 37 years), halitosis, hypersalivation, hypoalbuminemia, impossibility to reach the stomach were more common. Combining rectal palpation, gastroscopy, abdominal fluid cytology and endoscopy or AUS-guided biopsy improves the ante-mortem diagnosis rate. Further studies are needed to find some specific precocious biomarkers of GSCC.

#### References

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3. Wester PW, Franken P, Häni HJ. Squamous cell carcinoma of the equine stomach, a report of seven cases. The Veterinary Quarterly 1980; 2(2): 95-103



\*Figure 1 : Endoscopic view of a gastric squamous cell carcinoma (Vetagro sup)



\*\*Figure 2: Thickened stomach wall on abdominal ultrasonography (Vetagro sup)



\*\*\*Figure 3 : Gastric squamous cell carcinoma on post-mortem examination (Vetagro sup)