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## HOW TO APPROACH INJURY OF THE EQUINE HEAD AND EYE?

### Introduction

The horse is prone to injuries of the head, due to its nature, environmental conditions and the equipment and tack used for the horse. Most injuries can be properly dealt with by the veterinarian in the field.

It's important to realize that sometimes though, small wounds can be very serious and it is of critical importance to select those cases that need a more extensive diagnostic workup or a more comprehensive treatment plan<sup>1</sup>. In this presentation some of these latter cases will be discussed.

### Eyelid lacerations

Lacerations of the eyelids are common in horses and repair is necessary to maintain ocular health. It is important to perform a complete and thorough ophthalmic examination, to determine the severity of the injury and to devise an appropriate treatment plan.

For example the lack of pupillary light responses, corneal lacerations, fibrin in the anterior chamber or orbital fractures cannot be missed and these warrant a different approach or additional treatments<sup>2</sup>.

Suturing of an eyelid laceration can often be done in the standing sedated horse with local blocks<sup>3</sup>. Due to the excellent blood supply to the eyelids, most lacerations heal very well after suturing, even when a laceration is several days old<sup>4</sup>.

### Sinus trauma

Most horse with trauma to the sinus regions have comminuted fractures and 3D imaging is often advised to the owner to visualize the extent and severity of the fractures. Even if the skin is intact, these fractures are considered open fractures, because usually the sinus or mucosal lining of the nasal passages are penetrated and often epistaxis is seen.

Reconstructive surgery should be performed, because primary open reduction provides the best cosmetic results. Some facial fractures of the paranasal sinuses and nasal cavity heal spontaneously; however, failure to treat them may result in chronic sinusitis, bone sequestra, nonhealing wounds, facial deformity, and secondary nasal septal thickening or necrosis<sup>5</sup>.

After the trauma, horses show nasal discharge for a few days to weeks and sometimes lavaging of the sinuses in combination with antibiotic treatment is necessary, depending on the severity of the trauma<sup>5</sup>.

### Suture line periostitis

An inflammation of the suture lines of the equine skull can result in the development of firm swellings of the head. This so called suture line periostitis is thought to be the result of instability or direct injury and is often the result of trauma to the equine head<sup>6</sup>. Initially these swellings are noncalcified but within a few weeks bony exostoses develop. These bony swellings eventually remodel back to a normal contour, but this can take 12-18 months<sup>6</sup>. Usually no treatment is required. It is important to reassure the owners that most of these cases will heal by themselves.

### References

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