Orthopedic Clinical case :

Anamnesis :

This clinical case is about an Arabian gelding that ran in the 160km race of Compiegne (France) 2020. At the arrival of the last loop, he hit a flowerpot.

At the vet gate, he seemed to be tired but all of his metabolic parameters were good and he passed the gate's control without abnormalities.

After the final vet control, the veterinary advised the rider to bring the horse to the treating veterinarian stalls to check its general condition and administrate him a comfort infusion of Lactate Ringer. His metabolic and locomotor parameters were still good but not perfect. The horse was still tired, the heart rate was still between 60 and 64 BPM.

It has been decided to start by giving him 10 liters of lactate ringer and monitor its parameters. After that (one hour later) its heart rate was still high (64bpm). It was decided to give to the horse 10 more liters. During the infusion, he took an analgesic position and didn't put weight on its left forelimb. he showed signs of intensive pain in this limb.

Diagnosis:

In order to delve further into the issue of the diagnosis, we decided to do X-rays of the fetlock area. We took 2 views: a dorsopalmar and lateromedial view.

Thanks to this exam, we were able to highlight an incomplete articular fracture of the proximal phalanx.



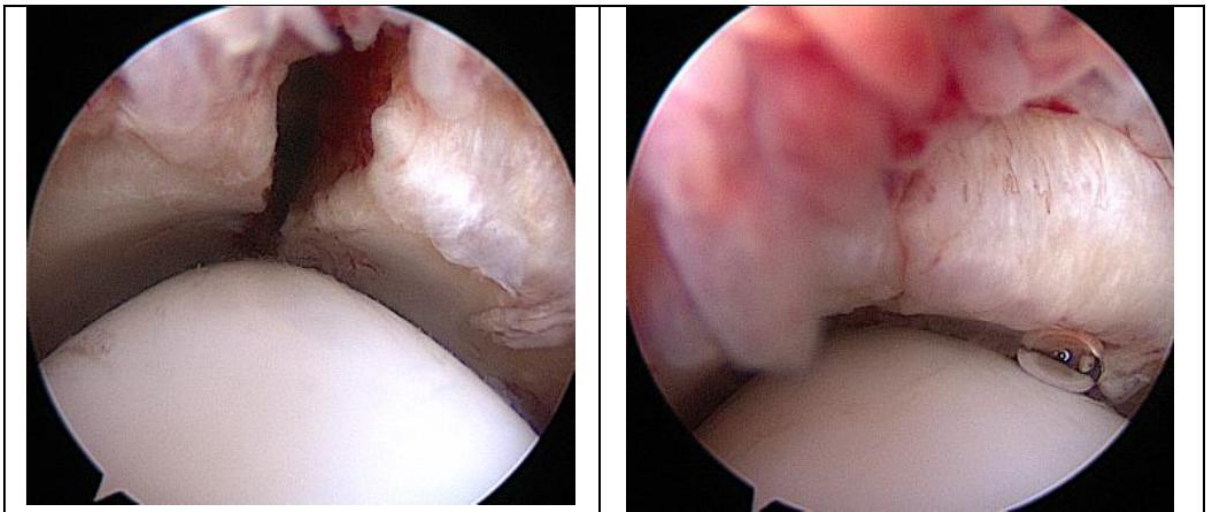


Treatment

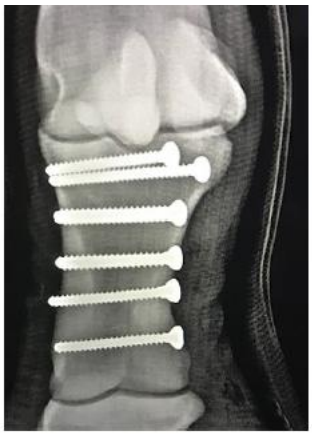
In order to immobilize the fracture, we put in a plaster cast. In the first place, we put a layer of soft band, then a layer of veterinary gamgee and a layer of vetrap band. Above this bandage we put the resin plaster and a simple band to protect the resin.

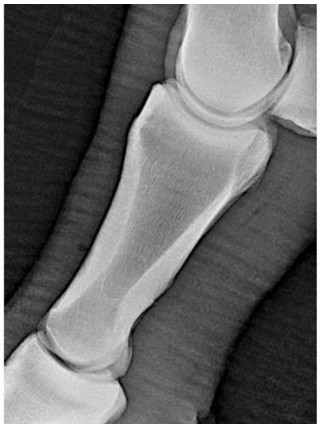
Also on site, flunixin meglumine was injected with a dose of 1,1mg/kg intravenously.

After the race, he was transported to the Equine clinic of Grosbois in order to do orthopedic surgery. The next day, they realized the surgery putting six screws to reduce and stabilize the fracture.



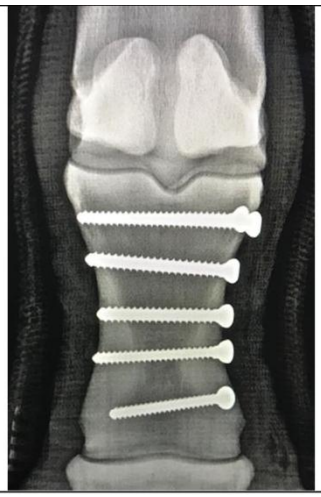












The surgery went well, the horse was comfortable, they let a plaster for 8 weeks.

The horse was sent home a week after the surgery and the last news we had was that the plaster had been taken off and that the horse could go out in a little pasture.

Discussion :

Stress fractures are frequently reported in endurance riding, as well as in other disciplines (flat racing, eventing). Stress fractures are spontaneous fractures caused by repeated impacts on the limbs. However, these fractures most often occur over shorter distances run at high speeds. The most common fractures are those of the metacarpals (or metatarsals), the carpals, and the proximal phalanx.

This fracture occurred at the arrival of a 160 km race, most likely amplified by the shock sustained by the limb. The pain did not appear immediately, the horse was fortunate enough to arrive on its 4 limbs in the care boxes allowing us to address the issue since the pain only started during the infusion. Because of this, the X-ray was done immediately and it enabled us to immobilise the limb before the fracture was displaced.

Many stress fractures are non-articular, which allows for a better recovery prognosis than articular fractures which despite surgery (as performed in this case) have a poor prognosis due to the development of articular arthrosis.

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