

CLINICAL FINDINGS AND DIAGNOSIS OF AORTOPULMONARY FISTULA IN 4 FRIESIAN HORSES

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Aims: To report the results of clinical examination, blood exam, cardiac ultrasound and cardiac catheterisation in 4 Friesian horses with an acquired aortopulmonary fistula due to aortic rupture. **Methods:** Four Friesian horses (age 1 to 7 years; 3 mares and 1 gelding) were presented at the university hospital for reasons of colic and tachycardia. Duration of the clinical signs varied from 6 hours to two weeks. **Results:** All horses presented with sinus tachycardia (64-96 bpm) with a marked bounding pulsation of the common carotid artery. Respiratory rate ranged between 24 and 80 breaths per minute. A holosystolic and early diastolic murmur over the aortic valve was present in 2 horses. Abnormal haematological findings included mild anaemia and thrombocytopenia, and an increased CK, LDH and cTnI. Thoracic radiography (n=2) and ultrasound (n=4) showed an increased diameter of pulmonary vessels and signs of pulmonary oedema in 1 horse and a small amount of thoracic fluid (n=3). In all but one horse, cardiac ultrasound revealed fistulation of the aorta into the pulmonary artery with turbulent flow in the pulmonary artery, blood accumulation between both vessels (n=2) and pulmonary wall dissection (n=2). In all horses, cardiac catheterisation showed increased right heart pressures and pulmonary hypertension with increased p_aO_2 and saturation in the distal pulmonary artery approaching systemic values (n=3). One horse died after 10 hours; the others were euthanized after 1 to 7 days. *Post-mortem* confirmed an aortopulmonary fistula near (but not at) the remnant of the *ductus arteriosus* in all horses. **Conclusions and Practical significance:** Aortopulmonary fistula should be included in the differential diagnosis of colic combined with tachycardia. Friesian horses are predisposed to this condition of which diagnosis is made by thorough ultrasonographic examination and cardiac catheterisation. Horses may survive for several weeks but the condition is usually fatal.