

Aortoiliac thrombosis

Aortoiliac thrombosis is a progressive vascular disease characterised by an exercise-induced hindlimb lameness associated with a thrombus of variable size in the terminal aortic. The cause of this condition is still unclear.

History

An 8 year old Thoroughbred gelding was referred to Clyde Vet Group Equine Hospital for investigation of an intermittent but severe hindlimb lameness. The horse had been competing at BE eventing and had recently stepped up to Intermediate level. During the 3 months prior to presentation, immediately following galloping exercise the gelding had become very lame on the right hindlimb. This had happened on three occasions, the first after galloping for 1 mile and the second and final occasion after about 6 furlongs (3/4 of a mile). On the last occasion the horse had appeared to be also showing colic-like signs with repetitive stamping of the right hind foot. The referring veterinary surgeon had been called out to examine the horse following each of the three episodes of lameness. The vet had arrived 60 to 150 minutes after the onset of lameness and at all 3 examinations the horse was found to be virtually sound. No abnormalities were detected on examination and referral was made to Clyde Vet Group Equine Hospital.

Clinical examination

Examination demonstrated the horse to be sound in both hindlimbs. Mild tarsocrural (hock) and fetlock joint effusions were noted the significance of which was unclear.

Due to the history, rectal ultrasonographic examination was undertaken. A large echodense mass typical of a thrombus was found in the dorsal lumen of the caudal aorta that continued into the right internal and external iliac arteries. The size of the main thrombus within the aorta was 7 x 2 x 3cm approximately (Figure 1). The left arteries were unaffected. Doppler ultrasound was undertaken confirming the nature and size of the luminal obstruction (Figure 2). A diagnosis of aortoiliac thrombosis was given.

The horse was exercised at the clinic for 20 minutes in an attempt to mimic the clinical signs seen by the owner. Whilst we were not able to induce the more severe signs, we found that immediately post exercise the right hind limb appeared colder than the left. We were not able to witness reduced filling in the saphenous vein, another sign often found with aortoiliac thrombosis.

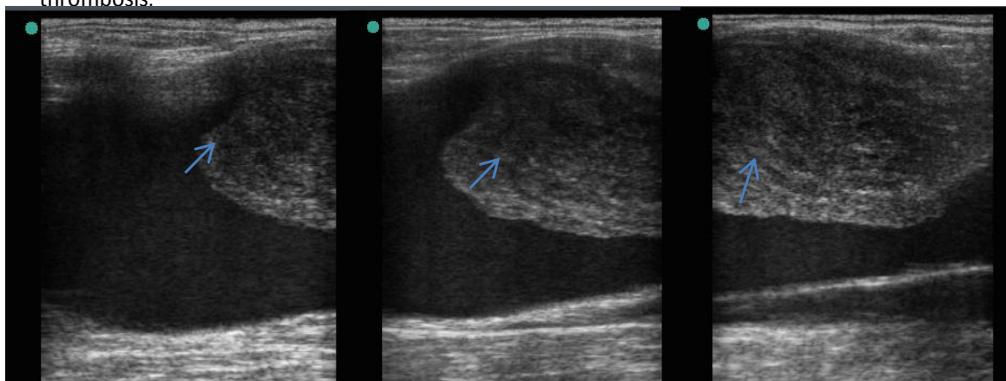


Figure 1. Longitudinal scans of the thrombus within the aorta. (Cranial is to the left)

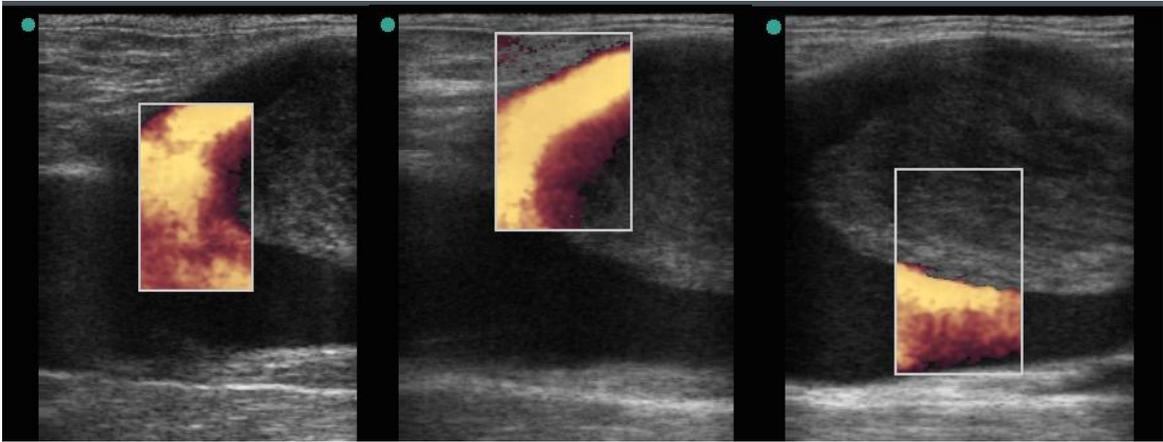


Fig 2. Doppler ultrasound images demonstrating how the thrombus was altering blood flow in the aorta. (Cranial to the left).

Therapy

The size of the thrombus meant that a poor prognosis for any therapy was given to the owner. The horse was treated with fenbendazole (15mg/kg sid for 3 weeks) and aspirin (5mg/kg sid for 6 weeks). During this time the horse was field rested.

Reexamine some 8 weeks later revealed no significant changes clinically or ultrasonographically. We discussed with the owner the possibility of taking the horse to surgery for thrombectomy (see later). They considered this option, however decided on economic grounds against this option and retired the horse from competitive work.

Telephone follow-up some 4 months later revealed that the horse had not had any further episodes of acute lameness.

Surgical thrombectomy

The successful medical management of aortoiliac thrombosis is rare. In one series of 29 horses, only 2 returned to their former athletic function following medical management (Dyson and Worth 1997)

Surgical removal of the thrombus has recently been described (Rijkenhuizen *et al* 2009) and had a success of 53% in 17 horses that underwent the procedure. Complication rates are high particularly, post operative myopathy, and unfortunately reocclusion of the treated vessels can occur.

References:

Dyson, S.J. and Worth, L. (1997) Aortoiliacofemoral thrombosis. In:- Current equine therapy IV Ed. N.E. Robinson. Saunders, Philadelphia. pp 267-268.

Rijkenhuizen, A. B. M., Sinclair, D. and Jahn, W. (2009), Surgical thrombectomy in horses with aortoiliac thrombosis: 17 cases. Equine Veterinary Journal, 41: 754–758.