A four year old thoroughbred mare in the company of two other horses collapsed and died while on transit from Nairobi to Eldoret (distance of about 311 Km), Kenya. The animal had successfully participated in a horse racing event and was on its way home. Reports indicated that the mare had been healthy for the last one year and had no unusual clinical finding before, during or after racing. The blood smear at ante-mortem was negative for Anthrax bacilli. Necropsy revealed a pale carcass with lots of blood clots in the abdominal cavity, heart chambers devoid of blood and a 10 cm long ventral longitudinal tear of the abdominal aorta. The aortic tear was surrounded with blood clots. The aortic wall was thinner with increased luminal diameter at the level of rupture compared with the unaffected part; suggestive of a pre-existing aneurysm. It is concluded that the patient may have died of hypovolemic shock resulting from severe hemorrhage.

Keywords: Mare, Abdominal aorta, Aneurysm, Rupture

INTRODUCTION

Equine practice is currently confronted with increasing cases of horses suffering fatal aortic rupture (Van der Linde-Sipman et al., 1958; and Ploeget et al., 2012). Acute hemorrhage often follows the rupture leading to signs of acute cardiac failure and death (Roby et al., 1986; and Sleeper et al., 2001). Occurrence of aortic rupture has been associated with hereditary factors (Bijma, 2000), aneurysm (Okamoto et al., 2007), inflammation (Abdul-Hussien et al., 2007), arteriosclerosis and hypertension (Hirai et al., 2006). This condition in horses is reported to occur within the thoracic cavity mainly at the aortic arch near the ligamentum arteriosum (Ploeg et al., 2012). The current report describes clinical history and necropsy findings of a mare that died of acute abdominal aortic rupture.

Case History and Necropsy Findings

A four year old thoroughbred mare in the company of two other horses collapsed and died while on transit from Nairobi to Eldoret (distance of about 311 Km), Kenya. The animal had successfully participated in a horse racing event and was on its way home. Medical history indicated that the mare had been healthy for the last one year and
had no unusual clinical finding before, during or after racing. The blood smear at ante-mortem was negative for Anthrax bacilli. Necropsy revealed a pale carcass with lots of blood clots in the abdominal cavity (Figure 1), heart chambers devoid of blood and a 10 cm long ventral longitudinal tear of the abdominal aorta. The aortic tear was surrounded with blood clots. The aortic wall was thinner with increased luminal diameter at the level of rupture compared with the unaffected part; suggestive of a pre-existing aneurysm. It is concluded that the patient may have died of hypovolemic shock resulting from severe hemorrhage.

The authors believe that a pre-existing asymptomatic aneurysm on the abdominal aorta may have ruptured due to shaky movements of the truck on a bumpy road. This may have led to severe abdominal hemorrhage, hypovolemia, cardiac failure and subsequently sudden death. Sub-acute to chronic aortic rupture have been reported in patients with aortic tear, allowing for stabilization for several weeks in some cases. In such protracted cases, noted clinical signs may include recurrent colic, epistaxis, coughing, peripheral edema and cardiac failure terminally (Ploeget et al., 2012).

**CONCLUSION**

It is concluded that acute abdominal aortic rupture can occur in adult horses on transit causing fatality. Pre-disposing conditions such as aneurysms may be asymptomatic and can be difficult to detect early enough to warrant remedy. It is important to transport horses on comfortable trucks using well maintained roads.

**REFERENCES**


