Prepubic tendon rupture in late term mares - a genetic link?
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All breeds of horses are affected by abdominal wall tears or ruptures in pregnancy. These conditions have serious consequences and may progress to complete rupture of the prepubic tendon which can result in the loss of the mare, foal or both. Trauma, advanced age, or excessive weight due to twins may be risk factors but in most cases, no cause has been established.

In the summer of 2012 the Western College of Veterinary Medicine admitted an Egyptian Arabian broodmare that presented with bilateral abdominal herniation one day postpartum. She was stabilized and later released with a healthy foal at side. Anecdotal information from the owners revealed a similar condition in a close relative of this broodmare. Reviewing records of previous late term or postpartum abdominal herniations or prepubic tendon ruptures, it was found that since 2002, five of seven mares with prepubic tendon rupture or abdominal wall herniation have been of Egyptian Arabian descent. Researching the pedigrees of these mares revealed a common ancestry. These cases suggest there may be a genetic predisposition to prepubic tendon rupture or abdominal wall herniation in certain familial lines of Arabians. This further prompted investigation into abdominal wall thickness of normal late gestation and non-pregnant mares. The abdominal walls of 12 healthy non-pregnant mares and 13 healthy mares greater than 10 months pregnant were measured. No significant difference was found between breed groups or between pregnant and non-pregnant mares.

The hypothesis of a heritable component for the development of prepubic tendon rupture or abdominal wall herniation is still under current investigation. Focus now lies on measurements of abdominal wall thickness in Arabian mares, both pregnant and non-pregnant.

Selected references