Postpartum uterine rupture: standing laparoscopic repair in three mares

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Objectives
To describe surgical techniques for repair postpartum uterine ruptures in mares by standing laparoscopy

Study design
Clinical set up

Sample Population
Adult female horses (n=3)

Case description
Three mares (n=3) underwent diagnostic laparoscopy because of suspicion of postpartum uterine ruptures. All three horses showed clinical signs of a uterine rupture between one and three days after parturition and underwent diagnostic laparoscopy. In all cases a full thickness uterine rupture could be detected and was sutured during laparoscopy. Development of suture material and surgeon experience were responsible for the surgical methods chosen for repair. In the first case described a barbed loop suture was available so the uterus could be closed intraabdominal during laparoscopy. In the second case extra corporal knots were made for repairing. The first case for the surgeon was the last case here described where a hand-assisted laparoscopic approach was chosen and a mini-laparotomy was performed for suturing the ruptured uterus.

Results
Two out of three mares were alive for at least 12 months after surgery without any abdominal problems. One of these mares delivered a healthy foal two years after surgery. The third mare died 3 months after surgery but no pathology was done.

Conclusion
Laparoscopy should be kept in mind for postpartum mares with signs of peritonitis to visualize the uterus and repair a rupture if it is reachable. The use of the barbed suture for intracorporeal closure makes the minimal invasive laparoscopic technique easier to perform.