

Advanced Equine Reproduction Course

by

Matt Lampe and William B. Ley

Question:

I have a 15 year old mare that has a very fertile history despite several endometrial cysts, some of which are quite large. Last year she suffered early embryonic death (EED) between 45 and 90 days, and when checked open in the Fall was seen to have several huge cysts (30-40 mm) in the uterine body on ultrasound. My questions are: Is there any value in trying to rupture or remove these cysts prior to breeding her again? Does anyone have any experience treating these mares? Is it better to leave them alone? I would really appreciate any input that you may have.

Q: Is there any value to remove these cysts prior to breeding her again?

A: Probably. The cysts are of one of two origins, lymphatic or glandular, lymphatic seeming more likely given the size and location described (Ricketts). It seems that the cyst have increased in size and could possibly have interfered with nutrient delivery to the developing conceptus (Van Camp). Even given the suggestion that this mare has had cyst for an extended period of time with out any adverse complications it seems wise to remove these now larger cysts. These cysts while they may or may not hinder maternal recognition are certainly of no benefit to satisfactory reproductive efficiency. That said many authors note that these cyst are more common in older mares with poorer uteruses anyway and it may be a case of which came first cyst or other uterine pathology (Kenney)

Q: Is it better to leave them alone?

A: Again I can see no benefit to the mare to have these cysts in her uterus and complicate an already aging uterus's chances of maintaining a pregnancy. The cysts may interfere with the conceptus preventing luteolysis after day ten and may also cause absorption of nutrients to be compromised if one or more become entrapped between the developing placenta and the uterine wall (McKinnon). Additionally Adams has found that mares having many cysts or cysts having a greater diameter than 10 mm had a higher incidence of embryonic loss up to day 40. Those who had less than five (5) or a diameter of less than 10 mm did not have this associated increased loss (Ginther). Removal of cyst seems appropriate.

Q: What methods are available for removal?

A: Several methods have been tried including mechanical curettage, hypertonic saline infusions, cyst aspiration, rupturing them with and endoscopic biopsy tool, and more recently endoscopically guided laser obliteration (Neeley). Though I could find no current literature, discussions with people involved with laser obliteration seem to feel it is very effective and Blikslager reported increased pregnancy rates in a small group of mares in which laser obliteration was used. The main problem with aspiration, simple rupture, and hypertonic saline is that the cysts resolve only to return in a relatively short amount of time and this does not appear to be the case with the laser surgery.

Works cited.

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