An unusual case of fetal maceration in a cow
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The presentation of this case to the theriogenology service was initiated by discovery of a 2.75 inch mandible in the cervix of a cow, with additional fetal bones in the uterus. The nine-year-old Guernsey cow was due to calve two weeks prior to presentation. No calf observed at that time, but fetal membranes were passed. The size of the recovered mandible indicated a half-term fetus. It was hypothesized that only one fetus died earlier in gestation, followed by birth of a twin at full term, evidenced by the passage of fetal membranes.

The cow was previously treated for a uterine infection based on persistent, odiferous vaginal discharge. Transrectal ultrasonography revealed fluid and fetal bones within the uterus. The fetal bones were localized in the left uterine horn. The cervix was flaccid and open. The owners elected a hysterotomy by left flank incision. The fetal bones were removed manually through incisions in both uterine horns, and the uterus was thoroughly lavaged. The endometrium of the left horn was noticeably deteriorated. The cow was treated with antibiotics, anti-inflammatory drugs and recovered well. Months later, the cow was diagnosed with intraluminal and serosal uterine adhesions. Oocyte recovery, in vitro fertilization, and embryo transfer will be attempted, but to date no oocytes have been recovered.

The fascination in this case is the concurrent discovery of a mandible consistent with a rather small fetus, and expelled fetal membranes, which indicates the completion of parturition. It is speculated that this cow conceived twins nine months prior to passing the fetal membranes. One fetus died and was mummified while the other was carried to term. The mummy was retained inside the uterus after calving, and an ascending infection from the open cervix resulted in maceration. Pathophysiology and alternate mechanisms for these events will be presented.

Selected reference