



AGAINST THE ODDS

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As a general rule, horse breeders and veterinarians become very concerned with factors or events that are associated with reduced fertility, even if the factors are relatively minor. Consequently, when presented with a mare that has a serious issue affecting the reproductive tract, our natural instinct is to presume that such a mare will never become pregnant unless the condition is treated. The following case reminds us of the old adage 'never say never'.

A 12-year-old Quarter Horse mare presented to the clinic 8 days after having given birth to a nice healthy foal. She had a history of having sustained a severe injury to her perineum while foaling several years previously. The type of injury is called a third degree perineal laceration, which is when the wound extends from the vulva up through the perineal body into the rectum. Consequently, instead of two openings in the perineal region (a vulva and a rectum), there is only one common opening. In this mare the injury extended 6-8 inches deep, at which point the reproductive tract and intestinal tract became separated as they normally are. Perineal lacerations such as this one are not uncommon in the broodmare. They usually occur as a result of a dystocia in young mares with a large or malpositioned fetus, but can occur in mares of any age. Although horrific in appearance,

the injury itself is not life threatening to the mare. If left untreated, most mares would be considered to be infertile or at least have reduced fertility due to the high probability of uterine infections since the vulva is one of the main barriers that prevent bacteria from gaining access to the reproductive tract. However, this mare had produced several foals following the initial injury despite the fact that the laceration had not been repaired.

A reproductive evaluation was performed on the mare, beginning with an examination of her perineal area. One common opening filled with a few fecal balls was present below her tail. Fortunately, the flap of tissue that separates the vulva from vagina (the vestibulo-vaginal fold) was still intact and a speculum examination revealed a normal vaginal vault free of fecal material, debris, inflammation, and fluid. An ultrasound examination was subsequently performed and a large follicle was noted on her left ovary and normal uterine edema was present. No uterine fluid was observed. Since the mare was in heat, had a large follicle and no vaginal or uterine problems were detected, a plan was made to inseminate the mare the next day, despite the presence of the perineal laceration. I was a little pessimistic as to the chances of this mare becoming pregnant, especially on a foal heat breeding.

The following day we collected semen from a local stallion and inseminated the mare with half a billion motile spermatozoa. A second dose of semen was cooled and inseminated a day later. The mare ovulated on day 11 postpartum and was sent home. The mare did not come back into heat over the next 2-3 weeks and the owner presumed she was pregnant. Since there are other reasons that a mare may not return to heat, such as postpartum anestrus and persistence of a corpus luteum (pseudopregnancy), it was agreed that an ultrasound examination would be valuable to confirm if the mare was (or was not) pregnant. The mare was eventually brought to the clinic and students, residents and staff gathered to watch the pregnancy exam. Opinions were rendered, odds were given and bets were placed. Ultrasound examination subsequently revealed a beautiful normal embryo complete with a beating heart. Although we see hundreds of pregnancies each year, because of the circumstances this one was special.

Mares like this remind us that reproduction is an amazing process whose outcome is not always predictable. Some mares with slight tilting or decreased muscular tone of the vulva seem unable to become pregnant or keep a pregnancy without a surgical procedure called a Caslick's operation to close the top half of the vulva. This mare was able to become pregnant and carry a foal to term for several years in a row without a real vulva. Somehow it doesn't seem right.

We hope to see this mare again in the spring after she foals out. I'll probably tell the next crop of students that fertility in most mares with her condition will be reduced without surgical correction of her perineum. However, I'll remind them that mares do not

read textbooks and that the best predictor of a mare's fertility is her own breeding history.



Photo of mare with 3rd degree perineal laceration