

Dealing With Equine Dystocias

A difficult birth can be life-threatening for both mare and foal if not handled promptly and properly.

Posted by Alexandra Beckstett, The Horse Managing Editor | Jan 13, 2017 | AAEP Convention, AAEP Convention 2016, Article, Breeding and Reproduction, Foal Care, Foaling & Foaling Problems, Mare Care, Mare Care and Problems, Veterinary Practice



A difficult birth can be life-threatening for both mare and foal if not handled promptly and properly. |

Photo: Anne M. Eberhardt/The Horse

an excellent result and a dead foal.”

Spirito, a practitioner with Hagyard Equine Medical Institute’s Davidson Surgery Center, in Lexington, Kentucky, described ways veterinarians can resolve dystocias at the 2016 American Association of Equine Practitioners convention, held Dec. 3-7 in Orlando, Florida.

A normal, successful foaling should take no more than 30 minutes from when the mare starts to go into labor to when she delivers the foal. Veterinarians consider anything longer than this to be a dystocia, or a difficult birth, which can be life-threatening for both mare and foal if not handled promptly and properly.

“Time is of the essence in dealing with a dystocia,” said Michael Spirito, DVM. “Ten minutes can be the difference between

ADVERTISEMENT

He said there are four ways veterinarians can try to reduce a dystocia:

1. Assisted vaginal delivery This method can be performed on the farm or at the clinic with the mare standing and sedated. The veterinarian might use tools such as chains or a head snare to help the mare deliver the foal. “Once the (foal’s) rib cage enters the pelvic canal, the mare should be allowed to finish delivery herself to prevent rib fractures,” said Spirito.

2. Controlled vaginal delivery During this procedure, the mare is put under general anesthesia at the clinic and hoisted upside down from her hind limbs in a position called the Trendelenburg. “The advantages of the procedure are obvious in that the foal can be manipulated without pressure from the mare and the foal can be pushed in to allow much more room for manipulation,” he said.

3. Cesarean section When a dystocia can’t be corrected vaginally, the veterinarian will perform a C-section with the mare under anesthesia. Although many complications can arise, Spirito cited one study that showed mares have an 80-85% discharge rate post-C-section.

4. Fetotomy If the foal has not yet been delivered but is confirmed dead, an experienced veterinarian will use a wire to cut it into pieces and remove it from the mare. “The complications with a fetotomy are potential laceration of the uterus either with the fetotomy wire or the sharp ends of a bone,” said Spirito.

Then he listed the most common dystocia-causing positions, or presentations, a fetus can get stuck in when moving into orientation for delivery. Anterior presentations (in which the foal is facing forward out of the mare’s vulva) are usually easy to resolve, said Spirito.

“Often the mare will get down and correct herself,” he said, suggesting veterinarians put these mares in a stall and leave them along for a few minutes to see what happens.

Anterior presentations include:

- **Incomplete elbow extension**, which the veterinarian can typically resolve manually and easily.
- **Dog sitting/hurdling position**, in which one or both hind feet are tucked up near the front limbs. Veterinarians can sometimes manipulate these cases in the standing mare, but more frequently use the Trendelenburg position to reposition the foal’s hind limbs manually. If unsuccessful, the veterinarian must perform a C-section.
- **Carpal flexion/contraction** is common and occurs when one or both knees are flexed backward. “These foals are generally either quite large or contracted to some extent,” said Spirito. The veterinarian will place a chain around the foal’s pastern to correct it in the standing mare. If this is too difficult to do standing, he or she should place the mare in the Trendelenburg position.
- **Foot over nape position** occurs when one or more forelimbs get stuck over the foal’s head against the roof of the vagina. The veterinarian must correct this immediately, again using manual manipulation and chains, otherwise the mare is at high risk of rectovaginal fistula (perforation through the wall between the rectum and the vagina) or a perineal laceration, said Spirito.
- **Head and neck lateral flexion** is a common but difficult-to-correct dystocia in which the foal’s head is turned around toward its back. Sometimes the veterinarian can correct it using chains and snares, but most often the mare must have a C-section.
- **Head and neck ventral flexion** occurs when the foal’s head is bent down between its front limbs. It’s relatively easy to correct unless the veterinarian is unable to reach the foal’s head, in which case a C-section is necessary.
- **Shoulder flexion** occurs when one or both of the foal’s shoulders extend backward like a swimmer or a diver, said Spirito. This uncommon presentation requires chains or a C-section to resolve.
- **Ventral position**, in which the foal is facing forward, but upside down, is “generally easy to reduce and can usually be resolved at the farm,” said Spirito. Then there are the posterior positions, in which the foal’s head and body are facing backward, away from the birth canal.

“Common posterior presentations are generally referred to the facility almost immediately,” said Spirito. “These are extremely difficult to correct under field conditions.”

Posterior presentations include:

- **Hock flexion**, in which the foal's hocks are flexed up under his hind end, comprise about 25% of posterior cases, said Spirito. Because of the risk of uterine rupture, most require a C-section.
- **Bilateral hip flexion** generally occurs in deformed foals, which present with their hind legs stretched out beneath them. They typically require C-sections.
- **Ventral position, extended posture**, in which the foal is upside down with its hind feet stretched out toward the vulva, risks penetrating the mare's vagina or rectum. If the foal is not overly large, the veterinarian might be able to rotate the foal and deliver it in a posterior manner.

Lastly, some presentations are transverse, meaning the foal is sideways in the mare's body with either its back or, more commonly, its four limbs pointing toward the mare's rear. These are very rare, comprising about 7% of dystocias, said Spirito, and are typically associated with a congenital abnormality. They require an immediate C-section if the foal is still alive.

Before tackling any of these scenarios, said Spirito, the veterinarian should find out whether the owner is willing to have a C-section performed if necessary and if they have any financial constraints. Know that if 40 to 60 minutes pass from when the mare's water breaks and foaling, the neonate has a low survival rate. If it's 90 minutes or longer, the foal will not survive.

"Control how long you spend trying to solve the problem or manipulate the foal in the field," he said. "If it's longer than 15 to 20 minutes, refer to a clinic."

Not only does time elapsed decrease the foal's chances of survival but also the mare's if she gets fatigued and becomes recumbent (lies down and can't or won't get back up).

While the goal of resolving any dystocia presentation is a live mare and foal, sometimes the foal dies *in utero*, requiring a fetotomy. Fortunately, the mare's survival rate, based on previous studies, in this scenario is 95.8%, said Spirito, and she has a 79.4% prognosis for good fertility in the future. She can go home the next day, whereas a mare that's had a C-section might need to stay at the clinic for as many as five to seven days, depending on complications, and has a longer recovery period.

