



MECONIUM IMPACTION

Patrick M. McCue

DVM, PhD, Diplomate American College of Theriogenologists

Meconium is the first feces passed by the newborn foal and is comprised of digested placental fluid, gastrointestinal secretions, and cellular debris. It is usually dark greenish brown or black in color, firm pellets to pasty in consistency and is generally passed within the first 3 to 4 hours after birth. Failure to pass meconium results in significant abdominal pain in the neonate.

A foal is considered to have retained meconium or a meconium impaction if frequent unsuccessful attempts to pass meconium occur within the first 12 to 36 hours of life. It has been estimated that 1.5% of all foals are affected by meconium impactions. Colt foals reportedly have a higher incidence of meconium impactions than filly foals.

Mild clinical signs are usually apparent within 6 to 24 hours after birth and include failure to completely pass meconium, a progressive increase in abdominal pain, and frequent posturing and straining to defecate. Affected foals may also be depressed and reluctant to nurse.

The standard treatment for foals with a routine meconium impaction is administration of an enema. There are two types of enemas routinely used in neonatal foals to assist with passage of meconium. Perhaps the most common is administration

of 100 to 133 ml (approximately 3.5 to 4.5 oz) of a commercial sodium phosphate enema (Fleet® brand or generic equivalent). An effective alternative is to administer an enema consisting of 500 ml (approximately 1 pint) of warm soapy water by gravity flow through a soft flexible catheter.

Breeding farms may choose to routinely give all newborn foals an enema within the first 1 to 2 hours after birth or may selectively administer enemas only to foals that do not pass meconium on their own. Either type of management strategy is acceptable. Foals that do not successfully pass meconium in the first few hours of life should be treated because of the potential for significant complications, including colic, failure to nurse adequately and inflammation of the colon and rectum.

If administration of 1 to 2 sodium phosphate or soapy water enemas does not resolve a meconium impaction, your veterinarian should be contacted. Administration of a commercially available acetylcysteine enema may be successful in medically relieving refractory meconium impactions.

Acetylcysteine solution is slowly infused into the rectum through a soft, flexible catheter. The catheter is clamped shut and the solution allowed to remain in the rectum for 15 to 30 minutes before the clamp is

opened and the catheter removed. The foal should be then be monitored for complete passage of the retained meconium and observations continued for the next 24 to 36 hours. The presence of yellow 'milk stool' indicates that meconium has passed completely.

Additional therapy may be important in the management of foals with meconium impactions. Colostrum intake should be monitored, as it is a valuable source of antibodies required for passive transfer and has a strong laxative effect. Foals with colic associated with meconium impactions may not nurse as vigorously and may be at risk of failure of passive transfer. Your veterinarian may also administer intravenous fluids, medications to provide pain relief, or other treatments as needed. Rarely, but occasionally, a severe refractory case of meconium impaction may require surgical intervention.

As with many medical conditions, early recognition and treatment is important in the successful management of meconium impactions.

