

Udder Problems in Mares

BY HEATHER SMITH THOMAS

Udder problems are not as common in mares as in cows, but a number of things can occasionally occur to create problems for the mare.

Dr. Ahmed Tibary, professor of theriogenology in the Department of Veterinary Clinical Sciences at Washington State University, says that some of the common questions mare owners ask involve abnormalities in lactation or mastitis (inflammation of the mammary gland).

“One of the things a lot of people ask about is mammary secretion in a filly during the first days of life,” Tibary said. “This may actually look like milk, and has often been called witch’s milk. This secretion is due to the dam’s hormonal influence during pregnancy and generally halts on its own within a few days.

“This situation can become complicated, however, if a person tries to milk or touch the mammary gland and it becomes infected. The enlargement of the filly’s udder should also be differentiated from other possible problems, such as hernias or some other abnormality of the ventral abdomen.”

Monitoring mares before and after foaling



COURTESY TIBARY & PALMER

A common complaint is seeing lactation in the absence of pregnancy or even breeding

LACTATION ABNORMALITIES

In the adult mare one of the most common complaints is lactation in the absence of pregnancy or even breeding.

“This is quite common in early spring,” said Tibary. “It could be due to the combination of cyclicity in the mare and the lush green pasture that sometimes contains plant-origin estrogens.”

As mares start cycling again after winter anestrus, some may leak milk.

“This is linked to an increase in the hormone prolactin when the mare begins her seasonal cycles—and the mammary gland starts developing,” Tibary said. “Sometimes the mare bags up but doesn’t have real milk, just a serous secretion. Others may actually produce milk.”

It is always a good idea to check the mare if this happens, even if she has not been bred. You want to make sure there was not an accidental breeding and she is getting ready to foal.

“Although rare, if the mare is developing an udder without pregnancy, it is also important to make sure it’s not due to an ovarian tumor,” said Tibary.

Pregnant mares that start bagging up or leaking milk long before their due date can be another problem—and should be carefully checked. This could be an indication that they may be preparing to abort the fetus.

“The two most common scenarios are abortions that we can’t do anything to halt, particularly if the mare is carrying twins, and placentitis, which we can do something about,” said Tibary. “Usually the mares with severe placentitis will start bagging up and producing milk earlier than normal.”

UDDER ABNORMALITIES

“Other than these examples, the biggest category of complaints is enlargement of the udder,” said Tibary, who noted several possibilities as to cause.

“It may be infection or inflammation (mastitis), and the signs can be quite variable. The udder may be just a little bit enlarged.”

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larged, or it may be very tight and painful. It may be so painful that the mare is lame and reluctant to move. There may be asymmetry (one side larger than the other) or some exudate or lesions on the skin of the udder.”

Another sign of mastitis would be a mare’s reluctance to let her foal nurse because the udder is so painful. She may kick at the foal.

Mammary gland enlargement should be thoroughly checked by palpation and careful inspection.

“We may ultrasound the gland and do a bacteriological and cytological examination of the secretions to check for infection,” said Tibary. “We can check to see if there’s a mastitis, which is relatively common in mares right after weaning their foals, but it is also sometimes seen right after foaling. Sometimes the only thing that makes us suspect that there is something wrong with the mammary gland is failure of the foal to grow normally—due to poor milk production.

“In some cases the inflammatory process may be due to an abscess. For example, pigeon fever can create abscesses, and sometimes these can be in the area of the udder. Other things that can contribute to



ANNE M. EBERHARDT PHOTOS

If a mare is reluctant to let her foal nurse, inflammation of the udders (mastitis) might be the cause

enlargement or increase in inflammation include secondary bacterial infection.”

There may also be neoplasia or tumors of the mammary gland.

“Some of the common tumors that we see include melanomas. These can be relatively aggressive. We also see quite a few adenocarcinomas. Occasionally, we see some cutaneous lymphoma in the udder.

“In developing countries we may also see parasitic lesions in the mammary gland, but I haven’t seen any here in the U.S. The most common things we see here are mastitis, adenocarcinomas, and melanomas.”

Sometimes in dirty conditions you might see bacterial infection carried to the teat opening by flies.

“You might see lesions similar to summer sores, due to flies, but this is not as common as in some other countries,” said Tibary.

Occasionally, a mare or filly will have inverted teats, nipples that are too small, or even extra teats. Malformed teats/udder are very rare in fillies and mares, however.

It’s important to remember that the udder has four quarters and each teat has two openings. There can be a plug in the teat that prevents milk flow. Most of the abnormalities seen in mares are actually from trauma and injury. When checking the udder, you should find that both sides look and feel the same. If the udder seems lopsided or painful, there may be a problem.

EDEMA BEFORE FOALING

Some mares develop a lot of edema around the udder before foaling. The blood supply and lymphatic system both have to change their course a little as the mare gets closer to foaling, according to Dr. Jon Palmer, associate professor of medicine and director of the Neonatal and Perinatal Programs at the Connelly Intensive Care Unit at New Bolton Center in Pennsylvania.

“There are some large blood vessels on the ventral abdomen when the mare is not lactating,” Palmer said. “The blood drains from the ventral abdomen up through the inguinal area. When the udder develops and there’s a need for more blood supply and more return of that blood, those blood vessels not only get larger but also reverse their flow.

“It takes a while for that to happen. So the large vein (the superficial caudal epigastric vein, also called the ‘milk vein’), instead of draining blood toward the udder, actually drains the blood toward the front of the body.”

This is why edema develops, and it is actually more extensive during a mare’s first pregnancy.

“After the mare has had a lactating udder, it’s easier to adapt,” said Palmer. “It’s similar to the first calving in a heifer;

she may have a lot of hard swelling, called caking, around the udder. Before a mare or cow develops her udder, the blood flows back toward the mammary gland, and after she makes udder, the blood flows forward. In cows the blood goes into what’s called the milk well, toward the heart.

“When you see swelling around the udder, this means it is developing. The best way to relieve this condition is exercise. This helps stimulate blood circulation and lymphatic drainage.

“Another thing that contributes to swelling or edema back toward the udder is the heavily pregnant uterus lying on the ventral abdomen. This also blocks some of the lymphatic drainage and blood flow, with the added pressure on the vessels.

“The good news is this means the mare is getting closer to foaling. If the swelling is excessive, it may help to do cold hosing, but exercise is generally all that’s needed. If the mare is in a stall or small pen, she should be turned out. It’s remarkable how much edema the mare can have in the morning when you turn her out, and when she comes back in at night the swelling is gone. People may think the udder is shrinking, but it’s not. This is just the edema around it.”

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In some instances a pregnant mare fails to come to her milk at foaling time. The mammary gland does not develop and she fails to provide adequate colostrum and milk for the foal.

Any examination of the mare should include checking the udder to make sure there are no problems

“Traditionally, the most common reason for a mare to do this would be a maiden mare that takes a while to come to her milk,” said Tibary. “Also, we see mares that are on fescue pasture that don’t produce milk, particularly if they have prolonged pregnancies.”

The opposite problem is a mare that develops a large amount of edema before foaling (see sidebar below, left).

“It’s not really an enlargement of the mammary gland as much as just fluid build-up in the tissues around the udder,” said Tibary. “Some of these get so bad that they start leaking blood along with the milk. These mares are a big concern because if there is blood in the secretions, they may be rupturing the suspensory ligament of the udder.”

A mare that is not pregnant may

also develop edema in and around the udder, but this may be due to part of the larger complex of edema resulting from disease.

“For example, if there is edema in the entire limb, this may be indicative of equine infectious anemia or equine viral arteritis,” said Tibary. “Some of the viral diseases will cause increased edema in the mammary gland.”

Edema in the udder may be simply a part of the whole picture, just as we see edema in the prepuce of a male horse with these diseases.

TREATMENT

For a mare with excess edema around the udder, treatment is aimed at reducing the swelling.

“These mares often respond to anti-inflammatory drugs,” said Tibary. “Otherwise, we just treat them locally with cold compresses.”

“Mastitis and abscesses will require very aggressive treatment to avoid further complications and loss of function. Treatment of mastitis in mares is often very difficult—it’s not as easy as treating a cow. Mares don’t like to be injected in the mammary glands.

“We usually try to strip out the milk and give them some help with anti-inflammatory medications and place them on systemic antibiotics. We use local in-

CHECK UDDERS

It’s a good idea to look at udders now and then, even on a non-pregnant mare. Ticks can attach to the udder or between the teats, or the udder may become sore due to fly bites. If the mare is working hard and sweating, there may be a mixture of sweat, natural oils, and dust, creating a grimy substance between the teats that may be itchy or uncomfortable to the mare.

“A person checking the udder should be careful not to stimulate the mammary gland to where she might be encouraged to start lactating—if the udder is already enlarged,” said Dr. Ahmed Tibary of Washington State University. “But any examination of the horse should include checking the udder to make sure there are no problems there. It is always important to see how the mammary gland is developing during pregnancy and how it looks during lactation and after weaning.”

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jections if possible, but the anatomy of the mare’s mammary gland does not lend itself well to these injections (unlike that of a cow).” **BH**



For the broodmare it is important to see not only how the mammary gland is developing during pregnancy but also how it looks during lactation and after weaning

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