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Castrating Mules and Jacks
By Heather Smith Thomas

Unless a male donkey is destined for breeding, he should be castrated, preferably while he is still young and has not yet developed typical male behavior. All male mules should be castrated, since they definitely won't be used for breeding. Even though male mules are infertile, they will still try to breed females and can be a dangerous nuisance if they are not gelded.

Gelding a mule or a jack is not as simple as gelding a young male horse. Extra care is needed when castrating donkeys or mules. It is wise to castrate them before 6 months of age, if both testicles are descended. This is recommended for two reasons—to prevent aggressive male behavior, and to get it done before the testicles and blood vessels become large, to avoid excessive bleeding.

The late Dr. Tex Taylor (veterinarian at Texas A&M who was a well-known authority on donkeys and mules) wrote a handout for veterinarians some years ago, entitled *Elementary Assology*, to help educate practitioners who were treating mules and donkeys in their veterinary practices. The booklet discussed differences among horses, donkeys and mules, their behavior, foaling (donkey and mule foals), using jacks as breeding animals, health issues commonly seen in donkeys/mules, and castration of mules and donkeys.

Nearly all male mules are castrated at some point in their lives, and an increasing number of jacks are castrated unless they will be used for breeding. Taylor mentioned that donkeys, and some mules, have more tendency to bleed excessively after castration than do horses, due to several factors. According to Taylor, donkeys and mules don't respond as well to most of the short-term anesthetics commonly used, and may not relax as much. They may also "wake up" quicker. This may contribute to a more hurried procedure by the person doing the surgery, and also increased blood pressure in the animal (if he is not as relaxed or begins to try to get up too soon).

Another factor is that donkeys and some mules have larger testicles than horses of the same age, with larger blood vessels supplying the testicles and more tissue to deal with during the surgery—and more chance for bleeding. Many donkeys also have thicker scrotal skin and larger blood vessels at the surface, but this is not as common in mules.

As male donkeys and mules mature, the scrotal area gets more fat deposits than in a horse. If the veterinarian cuts off the bottom of the scrotum during castration (a technique used by some vets) the chances for scrotal bleeding are increased. Most veterinarians now advocate ligating (tying off) the spermatic cord as well as using an emasculator (which crushes as well as cuts it), in donkeys--and also in mules, when in doubt regarding the risk for bleeding.

Taylor preferred to ligate the entire cord (as high as possible) and to use the emasculator tool below the ligature. By including the surrounding membrane in the ligature (tying off the whole structure), Taylor felt that the chances of bleeding and the risk for evisceration (intestines coming down through the opening) are reduced. He felt

that evisceration is always a worry when castrating mature jacks because of the very large size of the spermatic cord.

Even though thousands of male donkeys and mules have been successfully gelded without taking this precaution, the chance of complication (with possible fatality) makes it worth doing. Taylor tried gelding several of his own animals without ligation to see if bleeding was a problem, and it was. Ligation (tying off the cord as high as possible) can often be difficult in the standing animal, and Taylor always preferred to not geld mules standing.

There has always been some debate regarding the best age to geld male foals (whether horse, donkey or mule). An increasing number of owners geld them early in life because then they don't have to deal with the development of aggressive male behavior. Some mule owners also feel that early-castrated mules will have more refinement, as well as growing taller than the males castrated after puberty.

The main drawback to castrating foals in the 2 to 3 weeks of life is a slightly higher risk for evisceration, due to either scrotal hernia or an enlarged inguinal ring (the structure surrounding the canal that allows the testicles of the male fetus to descend into the scrotum at about 9 to 10 months of gestation. If the testicles of the mule baby are in the scrotum at birth (as they should be), the boundaries of this inguinal canal are larger and less defined than at any other time of their life. But the veterinarian doing the castration can easily palpate and check for a hernia and close it with a stitch.

In a few instances, however, when castration is done very young, even tying off the cord or closing the inguinal ring with stitches may not prevent evisceration--just because the strength of these tissues at that young age may not be adequate to hold the stitches. According to Taylor, tissue strength increases greatly during the first 30 to 45 days of life. During this same time period, the internal inguinal ring contracts from as large as 3 to 4 inches down to about one inch or less. This is why the ideal time to geld a mule foal may be at some point after 2 to 3 months of age but before weaning--while the foal is still on the dam (for emotional security and self exercise following mama around the pasture).

Taylor recommends that any foal (especially mule or donkey foals) castrated any earlier than 2 to 3 months should have the external inguinal ring sutured, or at least a tying off of the spermatic cord. Routine castration techniques are probably effective after that age.

ADVICE FROM A DONKEY BREEDER -“Stallion tendencies will develop in any ungelded mule or jack and can be very hard to deal with—much worse than any stallion,” says Sybil Sewell (a long-time breeder of donkeys and co-founder of the Canadian Donkey and Mule Association and the Alberta Donkey and Mule Club). Sewell lives near Leslieville, Alberta and has bred donkeys for more than 40 years.

“Some vets prefer to geld when donkey or mule foals are just a few days or weeks old, and for our own donkeys, if at all possible, we like to geld them at about 4 to 5 months of age, while they are still on their mothers. It's so much easier on them. If you know right away that a certain one will be a gelding rather than a breeding jack, it is important to get it done as soon as possible,” she says.

“Aside from the behavioral issues, there's less risk of extensive bleeding when they are young. Complete ligation of the spermatic artery in donkeys is very important.

They can bleed to death if these arteries are not ligated, and I won't use a vet who doesn't put a stitch in and make sure those arteries are closed—as well as using the emasculator to crush the arteries and spermatic cord. The American Donkey and Mule Society encourages owners to get this done properly, to avoid problems.”

She tells of a jack that was more than 12 months old when they gelded him last year, and this is much later than they normally would do this surgery. “He was supposed to be going to someone in Colorado as a jack, but the sale did not go through. So we decided to geld him because then his life would be a lot better and we'd be able to find him a better home. The vet who gelded him said his testicles were as large as those of many adult horses. The testicles of adult jacks are huge. So it pays to geld them young because it is much harder on them when they are older,” says Sewell.

“We did geld one that was part of a breeding program we were disbanding, and he was 9 years old. I knew that if I sold him as a jack he could be difficult to handle, so we gelded him. He was still being obnoxious several weeks afterward and the vet who gelded him asked if we had a gelding that was bigger—and if so, put the two together. We did, and I expected a big battle, but they got along fine. The former jack realized the other one was bigger and didn't challenge him, and he was also lonely and very desperate for company. He was very cranky by himself, even though I walked him and he was out in a paddock for exercise every day. When we put those two together he was fine. He had lived by himself until then, because he was a breeding jack. Normally our jacks are kept in separate pens in winter, with weanlings next door for company. In breeding season they have the jennets for company,” she says.