I have a 17 year-old mare that has never had a foal. My regular veterinarian told me that she may have poor fertility and be hard to get pregnant. Is that really the case?

Actually that may very well be the case. Even if she has never been pregnant, the mare's reproductive tract will still undergo changes associated with age.

The older she is, the more likely she will have problems becoming pregnant. Not only do the eggs within the ovaries age and have an increasing risk of chromosomal abnormalities, the lining of the uterus (endometrium) degenerates and becomes fibrotic over time.

These degenerative changes occur mainly with aging and not necessarily from the effects of pregnancy. In fact, regular pregnancies tend to reduce or suppress many degenerative processes.

Another problem that occurs with aged maiden mares is that they lose the ability to clear the uterus of fluid (secretions) that is a normal part of the reproductive cycle.

Normally as a mare cycles the cervix (a barrier that protects the uterus from outside contaminants) softens and allows normal uterine contractions to push out accumulating fluid.

In these older maiden mares the cervix fails to relax and fluid builds up inside the uterus. This fluid is toxic to both sperm and an embryo, if one develops after breeding.

Also, in older mares the cells lining the uterus become less functional and are less likely to allow the placenta to develop fully and, therefore, to support a growing fetus in mid to late pregnancy.

Finally, in older mares their external reproductive tract conformation may become tipped forward over time, especially in Thoroughbred mares. This is more often associated with multiple foalings, but may be just incident with age. Either way, this condition increases the risk of reproductive tract contamination and infections.

With all of these factors going against an older maiden mare, one might wonder if it is worth the effort in trying to get them pregnant. There is hope.

Not all mares age in the same manner as others and there are techniques available to diagnose and treat many of these conditions.

For years, veterinarians specializing in equine reproduction at Oklahoma State University's Center for Veterinary Health Sciences have developed a clinic specifically dedicated to the older barren mare. From basic breeding management to delicate laser surgery, these veterinarians can offer hope to the career mare, that now at the end of a productive life in the performance arena, may be in line to pass on her genetics to the next generation. For further information, contact the Barren Mare Program at the Veterinary Center's College of Veterinary Medicine

Ranch or the Boren Veterinary Teaching Hospital.

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