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*A Tradition of Leadership and Excellence in Equine Medicine*

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**Embryo transfer  
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Assisted reproductive techniques, such as embryo transfer (ET), have become a common way to obtain continued offspring from the sub fertile mare who cannot carry her own foal to term or the younger mare who is in training or actively performing. These techniques also allow a valuable mare to have multiple foals per year depending on the registry she belongs to.

Embryo transfer is the recovery of an embryo from a donor mare and transfer of that embryo into the uterus of a synchronized recipient mare who will act as a surrogate and complete the pregnancy. Embryo recovery is usually performed 7 or 8 days after a mare has ovulated. The method of recovery is non-invasive and can be performed with the mare standing; sedated if necessary. The recovery procedure involves lavage of the uterus and takes less than an hour to complete.

Embryos can be transferred into the recipient's uterus by one of two methods: surgically or non-surgically. Because of advances in transfer equipment and perfection of technique the non-surgical method is becoming the most widely used.

The recipient mare can be checked for pregnancy 5-7 days after the transfer to confirm initial success. The donor mare can then be re-bred if necessary or if multiple embryos are desired.

Equine embryos can be transported in a cooled state, much like semen, and shipped either same day via airline or overnight via Fed X to a facility with a synchronized recipient and subsequently transferred. Equitainers are a common shipping container used for this purpose. The embryos, when packaged properly, survive very well. This can allow a donor mare to not leave the farm, whether due to health reasons or show schedule and still be part of an embryo transfer program. Embryo freezing as well as oocyte freezing are additional assisted reproductive techniques that will be available in the near future.

Most breeding registries allow the registration of 1 or more ET produced foals, with the exception of the Jockey Club and the Miniature Horse Association. Even though a mare may belong to a registry that doesn't recognize ET offspring or

only allows one registration per year, she can still produce more than one registerable foal per year by breeding her to a stallion of a different registry. For example: A Thoroughbred mare can be bred to a running Quarter Horse stallion, have that embryo transferred to a recipient mare, then she can be re-bred, this time to a Thoroughbred, and carry her own pregnancy to term, thereby producing two registerable foals in one year's time. There are many possibilities when Paint, Quarter Horse and Warmblood registries are considered.

Embryo transfer should be considered as a viable option in increasing a mare's economic production and continuing her genetics even after she's unable to do so herself. To learn more about embryo transfer and other assisted reproductive techniques contact us at Peterson and Smith Equine Reproduction Center, Summerfield, FL (352)307-3000.