



DOMINION EQUINE CLINIC

Stem Cell Therapy

Stem cells are cells that have the potential to develop into some or many of the different specialized cells that make up body tissues, such as tendon, ligament, muscle, bone, blood and nerves.

The commercial stem-cell treatments available for horse, make use of adult mesenchymal stem cells, or MSCs, which can differentiate into bone, cartilage, fat and fibrous connective tissue.

Tendons and ligaments heal slowly and often poorly, with disorganized scar tissue in place of organized collagen fibers, the resulting tissue has inferior elasticity. That results in an increased risk of re-injury at the same location. MSC therapy may allow better repair, with more organized collagen and less scarring. This therapy helps the most when it's given in the first few weeks after an injury.

The cells are harvested from bone marrow or fat, depending on the treatment method used. This is done with the horse standing and sedated, with local anesthesia. After harvesting the stem cells will be purified and cultured to obtain an increased number of cells. The resulting cells are injected into the lesion with ultrasonographic guidance.