

## STEM CELL THERAPY FOR DOGS

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*[Every effort has been made to ensure accuracy of information. However, this is not a substitute for prompt veterinary care. Any similarity to other publications is unintentional. Published online at Sealyhealthguard.org, 11/29/10]*

In 2007 our local news team did an interesting story on stem cell therapy for dogs. It is an emerging therapy with not a lot of medical proof that it works and it can be very expensive, but some dogs have gotten some great results. They're still at the clinical trial stage. It was once used almost exclusively in horses. An 8-yearold Papillon who showed in conformation and agility has polyarthritis, an autoimmune disease. He has had success with stem cell treatment and is moving around well. Cortisone injections, pain relievers and surgery are the usual treatment methods for arthritis.

In stem cell therapy, fat is harvested from the patient then stem cells are harvested from the fat. At an early point in their development, stem cells can differentiate into other types of cells like white blood cells, red blood cells or cartilage. The harvested fat is Fed-Exed to the Vet-Stem company in San Diego, which developed the therapy. Once there, the stem cells are extracted, put into syringes and over-nighted back to the veterinarian. He then injects the dog's own cells directly into the arthritic joints. This therapy is so new that it's not totally understood how it works or how long the good response in the patient will be.

Another example is an 11-year-old Golden Retriever who had arthritis. She couldn't get up from the hardwood floor, had trouble moving her back legs and needed help to get on the couch.

The Golden had the stem cell treatment in February and March. Her owners say the response was immediate. She can easily jump up on the couch now.

A single treatment, not including the preoperative work-up, can cost more than \$2,700, but there are owners willing to try this new treatment rather than have to put down their older pets.

An 11-year-old Australian Shepherd could barely walk in January when his owner first heard about the treatments while watching a national news program. They weren't offered in the St. Louis area at the time, so the owner had to travel to the University of Illinois in Champaign to get the shots. The only other option was euthanasia. In this case, the response was not immediate. There was only a little change the second week. By the third week, he was much better.

The injections themselves are considered safe. Most of the risk is typically associated with infections at the incision sites where the fat is harvested.

At this time, Dr. Jim Schuessler, a veterinarian at Kirkwood Animal Hospital, said the only dogs he's treating at present are those with osteoarthritis who can't take cortisone or non-steroidal anti-inflammatories, and aren't surgical candidates. So far, these successful cases are exciting and bring new hope to owners of dogs with arthritis. In the future, maybe stem cells will offer solutions for other diseases as well.

*Courtesy KSDK St. Louis*

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