



*Exclusively Equine Veterinary Services PC
Dr. Charlotte Kin & Dr. Amanda Wilson
PO Box 721777 Oklahoma City, OK 73172-1777
Phone: (405)973-5740 Fax: (405)470-1917
Exclusivelyequinedvm@yahoo.com*

IRAP

Osteoarthritis is a common cause of lameness and poor performance in horses. Osteoarthritis causes changes in the cartilage, and inflammation of the synovium (joint lining). This inflammation releases IL-1, Interleukin-1 (an inflammatory mediator) leading to further cartilage damage and increased production of IL-1. This becomes a vicious cycle leading to increased pain, inflammation and joint damage.

IRAP (Interleukin-1 receptor antagonist protein), also referred to as Autologous Conditioned Serum, is a natural product harvested from the horse's own blood. IRAP works by preventing IL-1 binding to the IL-1 receptors in the joint. This blocks the damage and inflammation induced by IL-1. IRAP treats the cause of the disease making IRAP a disease modifying treatment as well as an anti-inflammatory. It can be very helpful in the treatment of osteoarthritis and other inflammatory conditions, as well as in the post-operative period after joint arthroscopy. It can be used as the initial treatment of osteoarthritis, in patients that are no longer responsive to traditional joint injections, and in patients that corticosteroids are contraindicated as with metabolic diseases.

We harvest IRAP by drawing your horse's blood into a specialized syringe that creates an environment to stimulate production of the anti-inflammatory proteins. The syringe is incubated for 24 hours then centrifuged to separate the serum from the red blood cells. It is then divided into individual dose syringes, for three to five doses total. The serum is stored in the freezer until it is ready to be used.

Once processed, IRAP is injected in a sterile manner directly into the arthritic or inflamed joint. Injections are given 7-10 days apart typically for 3 treatments.

