

## **Platelet Rich Plasma**

The equine athlete puts a tremendous amount of strain on the tendons and ligaments of the lower limb. While executing their various sports, horses incur injuries in these tendons and ligaments. Managing these injuries is a daunting task. Many treatment options exist for treating these injuries. A relatively new treatment offered at Virginia Equine Imaging that shows promise is the use of Platelet rich plasma (PRP).

Platelet Rich Plasma is a suspension that contains a high concentration of platelets in a small amount of plasma. PRP is the result of processing fresh-whole blood from the patient in order to obtain the blood fraction that has the highest concentration of platelets. Platelets contain a number of growth factors and are released upon activation. These growth factors act to enhance migration of healthy inflammatory cells to the tissue injury site, form new blood vessels, and form of new connective tissue.

The use of PRP is one of the treatment options for both recent tendon and ligament injuries and those injuries that have not responded to rest and controlled exercise. Other incentives for using PRP in tendon and ligament repair include its availability (derived from the patient) and the likelihood that it will be rejected by the patient's immune system is quite low since it is made from the patients own blood.

Injection of PRP is performed in the standing horse under sedation and local anesthesia. Blood is obtained from the horse, processed, and the PRP is injected into the tendon or ligament injury. The healing progress is tracked via ultrasonographic examination conducted every 30 days over the first two months, and then in intervals of 2 to 3 months. In most cases, a single PRP injection is needed for complete healing of the injury.