Regenerative Medicine Hastens Healing of Stifle Injuries

Diagnosis: Arthritis, osteoarthrosis

In a groundbreaking study, Rich, a veterinarian, investigated the use of regenerative medicine in treating stifle injuries in horses. He observed that regenerative medicine can be effective in treating injuries, especially those involving the cartilage, by promoting tissue repair and pain relief. He noted that regenerative medicine can provide sustained pain relief in joints like this though.

Rich also pointed out that while regenerative medicine can be effective in treating certain types of injuries, it may not be able to repair all types of damage. For example, if the joint cartilage has completely deteriorated, it is unlikely that regenerative therapy would be able to repair that much damage.

Rich further explained that, while there aren't necessarily any instances in which veterinarians should avoid using regenerative medicine, it might not help treat badly damaged joints. He also emphasized that the duration of the treatment is an important factor to consider. For instance, if the horse athlete can return to competition so much faster than they would otherwise and has the potential to remain in competition years longer than they otherwise would have, without requiring ongoing joint treatments such as corticosteroids, then it might be worth it in the long run.

Rich noted that the cost of the regenerative therapy is approximately the same as surgery. If you elect to use both surgery and regenerative therapy, the cost will approximately double. But it might be worth it in the long run.

The cost of board, maintenance of the horse, and the loss of show or race winnings during the time the horse is healing, as well as the time required for the horse to return to its regular work and competition, must be considered.

When it comes to selecting which option to use on your horse, Rich noted that regenerative therapy is a good option for animals with milder forms of arthritis, while surgery might be a better option for animals with more severe abnormalities identified on MRI.

Rich encouraged attendees to recommend ADRC and IRAP to clients with horses dealing with arthritis. He explained that there is a much earlier return to their normal athletic endeavors. He also pointed out that there are no recurrent stifle problems.

The researchers also kept tabs on how their patients fared in the long run, a step that's important in determining treatment efficacy. Rich said that the researchers have followed up with their patients for at least a year, and some were followed for more than nine years following treatment, with term follow-up success rates of the treatment being evaluated.

The researchers also characterized the horses' articular cartilage lesions as mild, moderate, or severe. Following treatment, all horses followed a standardized six-month rehabilitation program, which included hand walking, swimming, and other exercises to help the horses return to competition.

The researchers divided the horses into three groups for the study. Group 1 included horses that received stifle arthroscopy alone, Group 2 included horses that received stifle arthroscopy in addition to ADRC and IRAP injections, and Group 3 included horses that received stifle arthroscopy in addition to regenerative therapy.

The team found that the success rates were similar between the groups: 67%, 68%, and 59% for Groups 1, 2, and 3, respectively. The researchers also characterized the horses' articular cartilage lesions as mild, moderate, or severe. One horse in Group 2 had mild lesions, 20 had moderate lesions, and 17 had severe lesions; in Group 1, no horses had mild lesions, 20 had moderate lesions, and one had severe lesions; and None of the Group 3 horses had mild lesions, 14 had moderate ones, and 25 had severe lesions.

The team also determined that treatment with regenerative therapy and arthroscopy or regenerative therapy alone accelerated the horses' healing time. Horses in Group 1 and Group 2 healed significantly faster than those in Group 3; many of the Group 2 horses had stifle arthroscopy alone, while the Group 1 horses had both stifle arthroscopy and regenerative therapy. The researchers also characterized the horses' articular cartilage lesions as mild, moderate, or severe, and they found that the success rates were similar between the groups. Therefore, the researchers concluded that regenerative therapy and arthroscopy are effective in treating stifle injuries in horses, and that the success rates are similar between the groups.