Dehydrated Human Amnion/Chorion Membrane (dHACM) Injectable for Lower Extremity Tendinopathies

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Background
- Tendinopathy is a common condition that can significantly affect athletic performance and everyday activities of daily living.
- Growth factor-based therapies are increasingly being used to enhance healing in patients with tendinopathies.1,2

PURION® processed dehydrated human amnion/chorion membrane (dHACM) has been shown to contain growth factors that help in wound healing, including PDGF-AA, PDGF-BB, BFGF, TGF-β1, EGF, VEGF, and PIGF, as well as anti-inflammatory interleukins (IL-1ra, IL-4, IL-10), and TIMP-1, TIMP-2, TIMP-4, which help regulate the matrix metalloproteinase activity.3

Results from in vitro and in vivo experiments established that dHACM contains factors capable of stimulating mesenchymal stem cell migration and recruitment.3

In a feasibility study significant improvement in plantar fasciitis symptoms was observed in patients receiving injectable dHACM.4

Purpose
To evaluate the effectiveness of dHACM used in an injectable form as a treatment for lower extremity tendinopathies.

Methods
- Twenty-three patients with evidence of a lower extremity chronic tendinosis or tendinopathy were treated with dHACM injectable.
- The injection was preceded by a 0.25% Marcaine injection to accomplish local anesthesia.
- The dHACM injection consisted of 100 mg of dHACM reconstituted in approximately 2ml of normal saline.
- Using a sterile 25-gauge needle, the injection was administered through the substance of the tendon into the previously identified region of the tendinopathy.

Results
- Nineteen of 23 patients with lower extremity tendinopathy treated with dHACM injectable, experienced overall increases in activity and function with decreased pain.

References

Conclusion
Injection of dHACM to lower extremity chronic tendinopathies shows significant effectiveness as another alternative for patients who have failed prior modalities.