Exploring Therapies for Knee Osteoarthritis

The study looked at less expensive assessments and treatments for people with knee pain.

**Description:** Knee osteoarthritis is a common, expensive and debilitating condition for which there is no cure. *Magnetic Resonance Imaging in a Study of Prolotherapy for Knee Osteoarthritis* compared the standard MRI technique, which can take up to one hour, to a five-minute, less expensive MRI to determine if both methods can provide similar assessments of the knee. The study also assessed the effects of prolotherapy — an injection therapy for chronic musculoskeletal pain — on knee cartilage volume and pain relief.

**Results:** The extent to which the accelerated MRI protocol may replace the conventional protocol is still unclear. Prolotherapy resulted in safe, significant and sustained improvement of pain, function and stiffness scores compared to blinded saline injections and at-home exercises in knee osteoarthritis. Prolotherapy did not have a direct effect on cartilage volume, but data suggest it may mitigate discomfort caused by knee pain sources other than loss of cartilage volume.


**Next Steps:** Several abstracts have been published, including one from the World Congress of OARSI, the pre-eminent osteoarthritis research meeting; one peer-reviewed paper has been published and one is in review. Project leaders are currently analyzing data associated with a second injectant, as well as qualitative and long-term data. As these results are published, they will apply for federal funding to validate their findings in more definitive large-scale trials.