

## AUTOLOGOUS MESENCYMAL STEM CELLS CAN IMPROVE PAIN & FUNCTION IN DISCOGENIC LOW BACK PAIN

A recent pilot study in 26 patients with moderate to severe discogenic low back pain has demonstrated that an injection of mesenchymal stem cells (bone-marrow derived) into an injured or degenerated disc can effectively reduce pain and improve function. Authors found that pain scores (VAS) decreased from 79.3 at baseline to 33.2 at 12 months post-injection. Similarly, functional scoring (ODI) improved from 56.5 at baseline to 25.0 after 12 months. The study also provides evidence that mesenchymal stem cells may be able to slow or reverse degeneration of the disc as 8 of 20 patients showed improved disc signal on MRI after one year.

Pettine KA, Murphy MB, Suzuki RK, Sand TT. Percutaneous Lumbar Intradiscal Injection of Autologous Bone Marrow Concentrated Cells Significantly Reduces Discogenic Pain through 12 Months. *Stem Cells*. 2015; 33: 146-156.