



A Minimally Invasive Treatment for Lumbar Disc Herniation: DiscoGel® Chemonucleolysis in Patients Unresponsive to Chemonucleolysis with Oxygen-Ozone

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SUMMARY

A multitude of therapies is available to treat disc herniation, ranging from conservative methods (medication and physical therapy) to minimally invasive (percutaneous) treatments and surgery. O₂-O₃ chemonucleolysis (O₂-O₃ therapy) is one of the minimally invasive treatments with the best cost/benefit ratio and lowest complication rate. Another substance recently made available exploiting the chemical properties of pure ethanol is DiscoGel®, a radiopaque gelified ethanol more viscous than absolute alcohol^{8,9}. The present study aimed to assess the therapeutic outcome of DiscoGel® chemonucleolysis in patients with lumbar disc herniation unresponsive to O₂-O₃ therapy. Thirty-two patients aged between 20 and 79 years were treated by DiscoGel® chemonucleolysis between December 2008 and January 2010. The treatment was successful (improvement in pain) in 24 out of 32 patients. DiscoGel® is safe and easy to handle and there were no complications related to product diffusivity outside the treatment site.

The therapeutic success rate of DiscoGel® chemonucleolysis in patients unresponsive to O₂-O₃ therapy was satisfactory. Among other methods used to treat lumbar disc herniation, DiscoGel® chemonucleolysis can be deemed an intermediate procedure bridging conservative medical treatments and surgery.