

## 6-Month Results of Transdiscal Biacuplasty on Patients with Discogenic Low Back Pain: Preliminary Findings

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**Abstract :**

**Study Design:** Prospective observational study.

**Objective:** Our aim is to investigate the efficacy and safety of TransDiscal Biacuplasty.

**Summary of Background Data:** Chronic discogenic pain is one of the leading causes of low back pain; however, the condition is not helped by most non-invasive methods. The results of major surgical operations for these patients are unsatisfactory. Recently, attention has shifted to disk heating methods for treatment. TransDiscal Biacuplasty is one of the minimally invasive treatment methods. The method was developed as an alternative to spinal surgical practices and Intradiscal Electrothermal Therapy for treatment of patients with chronic discogenic pain.

**Methods:** The candidates for this study were patients with chronic discogenic pain that did not respond to conservative treatment. The main criteria for inclusion were: the existence of axial low back pain present for 6 months; disc degeneration or internal disc disruption at a minimum of one level, and maximum of two levels, in MR imaging; and positive discography. Physical function was assessed using the Oswestry Disability Index when measuring the pain with VAS. Patient satisfaction was evaluated using a 4-grade scale. Follow-ups were made 1, 3, and 6 months after treatment.

**Results:** 15 patients were treated at one or two levels. The mean patient age was  $43.1 \pm 9.2$  years. We found the mean symptom duration to be  $40.5 \pm 45.7$  months. At the sixth month, 57.1% of patients reported a 50% or more reduction in pain, while 78.6% of patients reported a reduction of at least two points in their VAS values. In the final check, 78.6% of patients reported a 10-point improvement in their Oswestry Disability scores compared to the initial values. No complications were observed in any of the patients.

**Conclusions:** TransDiscal Biacuplasty is an effective and safe method.

**Key Word :**

discogenic pain, low back pain, transdiscal biacuplasty, intradiscal electrothermal therapy, cool radiofrequency

*Volume 8, Number 1, - 2011*