

Gel-Based Autologous Chondrocyte Implantation (GACI) in the Knee: Multicentric Short Term Study

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Abstract : Autologous Chondrocyte Implantation (ACI) is used worldwide since 1998 to treat cartilage defect. GEL based ACI is a new tissue-engineering technique to treat full thickness cartilage defect with fibrin and thrombin as scaffold for chondrocytes. Purpose of this study is to see safety and efficacy of gel based ACI for knee cartilage defect in multiple centres with different surgeons. Gel-based Autologous Chondrocyte Implantation (GACI) has shown effectiveness in treating isolated cartilage defect of knee joint. Long term results are still needed to be studied. This study was followed-up up to two years and showed benefit to patients. All enrolled patients with a mean age of 28.5 years had an average defect size of 3 square centimeters, and were grade IV as per ICRS grading. All patients were followed up several times and at several intervals at 6th week, 8th week, 11th week, 17th week, 29th week, 57th week after surgery. The outcomes were measured based on the IKDC (subjective and objective) and MOCART scores.

Keywords : knee, chondrocyte, autologous chondrocyte implantation, fibrin gel based

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