

# Plasma Rich in Growth Factors to Treat an Articular Cartilage Avulsion: A Case Report

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## ABSTRACT

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**Introduction:** The application of an autologous plasma rich in growth factors is beneficial in restoring connective tissues, as shown by clinical evidence in oral surgery and more recently in arthroscopic anterior cruciate ligament reconstruction and two cases of ruptured Achilles tendon in professional athletes. This is attributed to the slow delivery of growth factors from harvested platelets that have been activated by endogenous thrombin promoted by the addition of calcium chloride. **Purpose:** This case report describes a new application of this therapy in the arthroscopic treatment of a large, nontraumatic avulsion of articular cartilage in the knee of an adolescent soccer player. **Methods:** After arthroscopic reattachment of the large (>2 cm) loose chondral body in its crater in the medial femoral condyle, autologous plasma rich in growth factors was injected into the area between the crater and the fixed fragment. **Results and Conclusion:** Despite the extremely poor prognosis of the case, complete articular cartilage healing was considerably accelerated, and the functional outcome was excellent, allowing a rapid resumption of symptom-free athletic activity. This technique opens new perspectives for human tissue regeneration. **Key Words:** PRGF, KNEE ARTHROSCOPY, TISSUE REGENERATION, FUNCTIONAL RECOVERY