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Case Study: Fresh OCA Core for Cartilage Repair in the Patellofemoral Joint Dr. Scott A. Rodeo, M.D. - The Hospital for Special Surgery

## BACKGROUND

The patient, a 43-year-old male, was experiencing an acute onset of knee pain when squatting. He reported discomfort and stiffness in the knee, which were exacerbated by stairs and walking downhill. He subsequently developed recurring effusions. The patient's symptoms persisted despite extensive nonoperative management.

# **PROGNOSIS**

His MRI demonstrated a traumatic, focal, full-thickness chondral sheer injury in the femoral trochlea. The patellar articular surface was intact and there was no evidence of patellar instability or patellar malalignments.



# PROCEDURE

The transplantation of two 10mm fresh, viable OCA cores were used to resurface the chondral defect. At the time of surgery, there was delamination of cartilage from the femoral trochlea, with intact cartilage on the patella articular surface. Post-operative rehabilitation utilizing immediate partial weight bearing with the knee locked in full extension began following the patellofemoral joint resurfacing and progressed to full weight bearing by six weeks following surgery.





## RESULTS

The MRI scan performed six months post-operatively demonstrated satisfactory trabecular bone incorporation and preservation of the overlying articular cartilage. There is a small resolving effusion. Clinically, the patient has minimal pain and continually improving strength and function in the knee.





#### SUMMARY

Microfracture was not considered because results are less predictable in patients over 30 and the reparative tissue can degenerate over time. The use of autograft tissue was not a good option given that the typical donor site is around the femoral trochlea. An OCA core presented several advantages in this case. For one, cores are composed of normal hyaline cartilage and bone allowing for treatment of both chondral and osteochondral lesions. Also, there is immediate availability of viable osteochondral tissue for transplantation that does not require size matching.

### ABOUT DR. SCOTT A. RODEO, M.D.

Dr. Rodeo specializes in sports medicine injuries of the knee, shoulder, ankle and elbow. He has specific expertise in complex knee reconstructions including meniscus transplantation, cartilage resurfacing, osteotomy and ligament reconstruction. He attended medical school at Weill Cornell Medical College in New York and completed both his residency and fellowship at the Hospital for Special Surgery. Currently practicing at HSS, Dr. Rodeo has received New York Magazine's "Best Doctors in New York" award three times and serves as the team physician for the New York Giants and U.S.A. Olympic Swimming team.

### **ABOUT JRF ORTHO**

JRF Ortho is the industry leader focusing on the best products, innovative solutions, and superior customer care. Our goal is to provide innovative solutions for allograft joint repair to orthopedic surgeons who specialize in helping patients regain movement and improve their quality of life; thus, JRF Ortho is redefining the standard for allograft joint repair and maximizing the gift of donation. Our unique member relationship with AlloSource® and Community Tissue Services® (CTS) enables us to offer the largest selection of specialized high-viability fresh osteochondral grafts, tendons and menisci in the industry.