

## CASE STUDY:

USE OF THE OVERTURETi™ KNEE RESURFACING SYSTEM FOR GRADE IV  
CHONDRAL LESIONS OF THE MEDIAL FEMORAL CONDYLE AND MEDIAL  
TIBIAL PLATEAU

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## Pre-op



## Case Presentation

Patient is a 62 y.o. female with a long history of right knee pain over the medial compartment. The patient had a right knee arthroscopy 2 years prior, which showed early degenerative changes in the medial compartment and a medial meniscus tear. A partial medial meniscectomy was performed. The patient was treated conservatively over the next 2 years with cortisone injections, Hyaluronic Acid injections, and physical therapy. Pre-operative MRI of the right knee showed a low-grade, complex tear of the posterior horn of the medial meniscus. Preoperative AP and Lateral x-rays of the knee showed medial compartment narrowing with focal, sclerotic changes of the medial femoral condyle and medial tibial plateau.

## Pre-op Plan

With the medial compartment showing focal, sclerotic degenerative changes, Dr. Vazquez decided to use the OvertureTi Knee Resurfacing System to target the diseased cartilage area while leaving the surrounding cartilage and soft tissues intact. This will be a less invasive approach than a Unicompartmental or Total Knee arthroplasty allowing the patient to maintain her healthy cartilage and experience potentially quicker recovery.

## Operative Findings and Approach

A diagnostic arthroscopy showed medial compartment grade IV changes on the femur and tibia which had exacerbated since the arthroscopy completed 2 years prior. There was a complex tear of the medial meniscus. ~30% of the meniscus was removed with a biter and shaver. A parapatellar, quad-splitting approach was used. The medial meniscus was tagged with two 0 FiberLinks. The meniscus was then released. A 20mm x 25mm OvertureTi Femoral Oblong sizer fit well over the femoral cartilage defect and proceeded with the technique for an 20mm x 25mm Oblong OvertureTi implant. Dr. Vazquez then turned his attention to the tibia and after trialing with different sizers, the 17.5mm fit well. He proceeded with the technique for the Tibia OvertureTi implant. Bone cement was placed into the peg holes previously drilled for the femur and tibia. The tibial component was implanted first then the femoral component in excellent position. Both implants were inset ~0.5mm from the surrounding cartilage surface. After copious irrigation, the meniscus was repaired with two 2.8mm Swivelocks anteriorly and Dr. Vazquez used 2-0 FiberWire to sew it to the bone and soft tissues.



## Post-op



## Follow-up

At 2-month follow-up, the patient is walking without any assistive devices. She continues to progress with physical therapy. Her range of motion is 0 to 120. She states that her pain is significantly improved from preoperative status. Her skin incisions are well healed. Her x-rays show the implants are well placed without any evidence of subsidence.

## Discussion

Dr. Vazquez wants to get the best clinical outcome by preserving as much of the patient's native anatomy as possible. The OvertureTi Knee Resurfacing System allows him to specifically address the area of cartilage and bone disease that is affected. By preserving as much of the soft tissue as possible, he can theoretically provide a more natural feeling knee. This system allows him to address osteochondral defects in the middle-aged population. He can address the patient whose disease does not necessitate unicompartmental or total knee arthroplasty, but is beyond the help of arthroscopic techniques alone. With the OvertureTi Knee Resurfacing System, Dr. Vazquez can address isolated femoral and tibial lesions easily and effectively.

