PREOPERATIVE DIAGNOSIS: , Bilateral degenerative arthritis of the knees.,POSTOPERATIVE DIAGNOSIS: , Bilateral degenerative arthritis of the knees.,PROCEDURE PERFORMED: , Right total knee arthroplasty done in conjunction with a left total knee arthroplasty, which will be dictated separately.,ANESTHESIA: , General.,COMPLICATIONS: ,None.,ESTIMATED BLOOD LOSS: , Bilateral procedure was 400 cc.,TOTAL TOURNIQUET TIME: ,75 minutes.,COMPONENTS: , Include the Zimmer NexGen complete knee solution system, which include a size F right cruciate retaining femoral component, a size #8 peg tibial component precoat, a All-Poly standard size 38, 9.5 mm thickness patellar component, and a prolonged highly cross-linked polyethylene NexGen cruciate retaining tibial articular surface size blue 12 mm height.,HISTORY OF PRESENT ILLNESS: , The patient is a 69-year-old male who presented to the office complaining of bilateral knee pain for a couple of years. The patient complained of clicking noises and stiffness, which affected his daily activities of living.,PROCEDURE: , After all potential complications, risks as well as anticipated benefits of the above-named procedure was discussed at length, the patient's informed consent was obtained.,Operative extremities were then confirmed with the operating surgeons as well as the nursing staff, Department of Anesthesia, and the patient. The patient was then transferred to preoperative area to operative suite #2 and placed on the operating room table in supine position. All bony prominences were well padded at this time. At this time, Department of

Anesthesia administered general anesthetic to the patient. The patient was allowed in DVT study and the right extremity was in the Esmarch study as well as the left. The nonsterile tourniquet was then applied to the right upper thigh of the patient, but not inflated at this time. The right lower extremity was sterilely prepped and draped in the usual sterile fashion. The right upper extremity was then elevated and exsanguinated using an Esmarch and the tourniquet was inflated using 325 mmHg. The patient was a consideration for a unicompartmental knee replacement. So, after all bony and soft tissue landmarks were identified, a limited midline longitudinal incision was made directly over the patella. A sharp dissection was then taken down to the level of the fascia in line with the patella as well as the quadriceps tendon. Next, a medial parapatellar arthrotomy was performed using the #10 blade scalpel. Upon viewing of the articular surfaces, there was significant ware in the trochlear groove as well as the medial femoral condyle and it was elected to proceed with total knee replacement. At this time, the skin incisions as well as the deep incisions were extended proximally and distally in a midline fashion. Total incision now measured approximately 25 cm. Retractors were placed. Next, attention was directed to establishing medial and lateral flaps of the proximal tibia. Reciprocating osteal elevator was used to establish soft tissue plane and then an electrocautery was then used to subperiosteal strip medially and laterally on the proximal tibia. At this time, the patella was then everted. The knee was flexed up to 90 degrees. Next, using the large drill bit, the

femoral canal was then opened in appropriate position. The intramedullary sizing guide was then placed and the knee was sized to a size F. At this time, the three degrees external rotation holes were then drilled after carefully assessing the epicondylar access as well as the white sideline. The guide was then removed. The intramedullary guide was then placed with nails holding the guide in three degrees of external rotation. Next, the anterior femoral resection guide was then placed and clamped into place using a pointed _____ was then used to confirm that there would no notching performed. Next, soft tissue retractors were placed and an oscillating saw was used to make the anterior femoral cut. Upon checking, it was noted to be flat with no oscillations. The anterior guide was then removed and the distal femoral resection guide was placed in five degrees of valgus. It was secured in place using nails. The intramedullary guide was then removed and the standard distal femoral cut was then made using oscillating saw.,This was then removed and the size F distal finishing femoral guide was then placed on the femur in proper position. Bony and soft tissue landmarks were confirmed and the resection guide was then held in place using nail as well as spring screws. Again, the collateral ligament retractors were then placed and the oscillating saw was used to make each of the anterior and posterior as well as each chamfer cut. A reciprocating saw was then used to cut the trochlear cut and the peg holes were drilled as well. The distal finishing guide was then removed and osteotome was then used to remove all resected bone.

The oscillating saw was then used to complete the femoral notch cut. Upon viewing, there appeared to be proper amount of bony resection and all bone was removed completely. There was no posterior osteophytes noted and no fragments to the posterior aspect. Next, attention was directed towards the tibia. The external tibial guide was reflected. This was placed on the anterior tibia and held in place using nails after confirming the proper varus and valgus position. The resection guide was then checked and appeared to be sufficient amount of resection in both medial and lateral condyles of the tibia. Next, collateral ligament retractors were placed as well as McGill retractors for the PCL. Oscillating saw was then used to make the proximal tibial cut. Osteotome was used to remove this excess resected bone. The laminar spreader was then used to check the flexion and extension. The gaps appeared to be equal. The external guide was then removed and trial components were placed to a size F femoral component and a 12 mm tibial component on a size 8 tray. The knee was taken through range of motion and had very good flexion as well as full extension. There appeared to be good varus and valgus stability as well. Next, attention was directed towards the patella. There noted to be a sufficient ware and it was selected to replace the patella. It was sized with caliper, pre-cut and noted to be 26 mm depth. The sizing guide was then used and a size 51 resection guide selected. A 51 mm reamer was then placed and sufficient amount of patella was then removed. The calcar was then used to check again and there was noted to be 15 mm remaining. The 38

mm patella guide was then placed on the patella. It was noted to be in proper size and the three drill holes for the pegs were used. A trial component was then placed. The knee was taken through range of motion. There was noted to be some subluxation lateral to the patellar component and a lateral release was performed. After this, the component appeared to be tracking very well. There remained a good range of motion in the knee and extension as well as flexion. At this time, an AP x-ray of the knee was taken with the trial components in place. Upon viewing this x-ray, it appeared that the tibial cut was in neutral, all components in proper positioning. The knee was then copiously irrigated and dried. The knee was then flexed _____ placed, and the peg drill guide was placed on the tibia in proper position, held in place with nails.,The four peg holes were then drilled. The knee again was copiously irrigated and suction dried. The final components were then selected again consisting of size F femoral components. A peg size 8 tibial component, a 12 mm height articular surface, size blue, and a 38 mm 9.5 mm thickness All-Poly patella. Polymethyl methacrylate was then prepared at this time. The proximal tibia was dried and the cement was then pressed into place. The cement was then placed on the backside of the tibial component and the tibial component was then impacted into proper positioning. Next, the proximal femur was cleaned and dried. Polymethyl methacrylate was placed on the resected portions of the femur as well as the backside of the femoral components. This was then impacted in place as well. At this time, all

excess cement was removed from both the tibial and femoral components. A size 12 mm trial tibial articular surface was then put in place. The knee was reduced and held in loading position throughout the remaining drying position of the cement. Next, the resected patella was cleaned and dried. The cement was placed on the patella as well as the backside of the patellar component. The component was then put in proper positioning and held in place with a clamp. All excess polymethyl methacrylate was removed from this area as well. This was held until the cement had hardened sufficiently. Next, the knee was examined. All excess cement was then removed. The knee was taken through range of motion with sufficient range of motion as well as stability. The final 12 mm height polyethylene tibial component was then put into place and snapped down in proper position. Again range of motion was noted to be sufficient. The knee was copiously irrigated and suction dried once again. A drain was then placed within the knee. The wound was then closed first using #1 Ethibond to close the arthrotomy oversewn with a #1 Vicryl. The knee was again copiously irrigated and dried. The skin was closed using #2-0 Vicryl in subcuticular fashion followed by staples on the skin. The ConstaVac was then _____ to the drain. Sterile dressing was applied consisting of Adaptic, 4x4, ABDs, Kerlix, and a 6-inch Dupre roll from foot to thigh. Department of Anesthesia then reversed the anesthetic. The patient was transferred back to the hospital gurney to Postanesthesia Care Unit. The patient tolerated the procedure well and there were no complications.