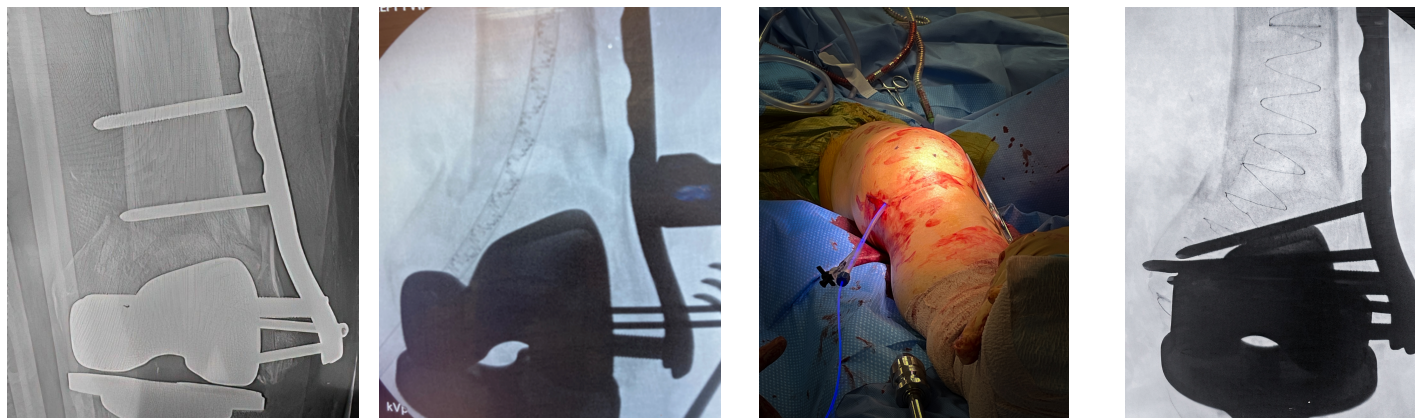


## Case Illustration

### Periprosthetic Distal Femur Fracture



Patient initially sustained a periprosthetic distal femur fracture which was repaired at another hospital. Over time the fixation failed, and the reduction was lost, resulting in the development of a varus deformity. The patient was referred for re-construction. The initial fixation was removed, the malalignment was corrected, and the metaphysis was impacted into the proximal segment to gain stability and alignment.

A supracondylar variable angle locking plate was inserted utilizing minimally invasive techniques positioned on the lateral cortex and provisionally fixed with k wires. The plate was secured and the reduction maintained with anterior based locking screws in the femoral condyles and blunt unicortical screws proximally, to avoid penetrating the intramedullary canal. A percutaneous approach was made to the distal most aspect of the medial femoral condyle in line with the IM canal on lateral imaging. A cannulated awl was used to gain access to the intramedullary canal adjacent to the femoral component. A guide wire was placed in the IM canal and across the fracture site, and the canal was reamed to clear the canal and to accept the IlluminOss sheath. An IlluminOss implant was inserted. Its length was chosen to be shorter than the plate length avoiding a proximal stress riser. On X-ray, there was no interference with the IlluminOss implant from the screw fixation through the lateral plate. Once the implant was filled appropriately with photodynamic liquid monomer, it was cured with visible blue light. Enhanced screw fixation was achieved by placing both variable angle locking screws distally and bicortical screws proximally into the IlluminOss implant, augmenting fracture stabilization. Patient was placed in a soft dressing with no motion restrictions and was encouraged to begin immediate weight bearing as tolerated.

US Indication: The IlluminOss Photodynamic Bone Stabilization System is indicated for use in skeletally mature patients in the treatment of traumatic, fragility, pathological, and impending pathological fractures of the humerus, radius, ulna, clavicle, pelvis, fibula, metacarpals, metatarsals, and phalanges. The IlluminOss Photodynamic Bone Stabilization System can also be used in conjunction with FDA-cleared fracture fixation systems to provide supplemental fixation in these anatomic sites. The IlluminOss System may be used in the femur and tibia to provide supplemental fixation to an anatomically appropriate FDA-cleared fracture fixation system.

For more detailed procedural information including Warnings, Cautions, Risks & Contraindications, please see the respective IlluminOss Surgical Technique Guide, Package insert or visit [www.illumino.com](http://www.illumino.com)