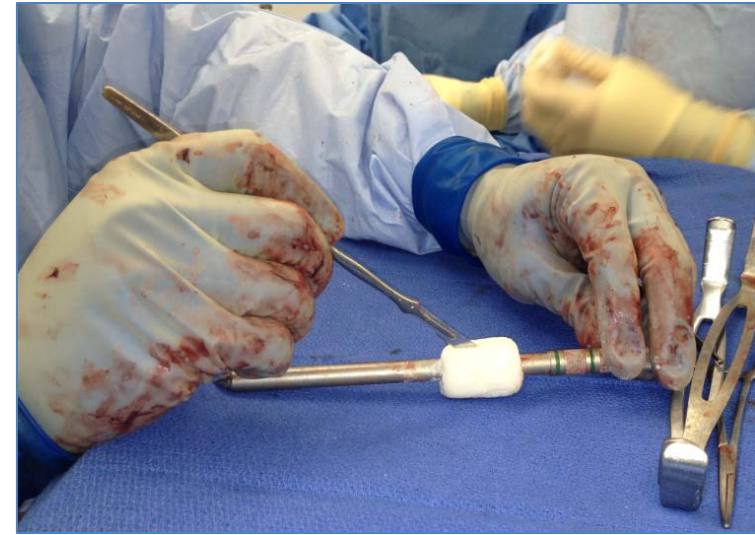


Stephen Kottmeier, MD

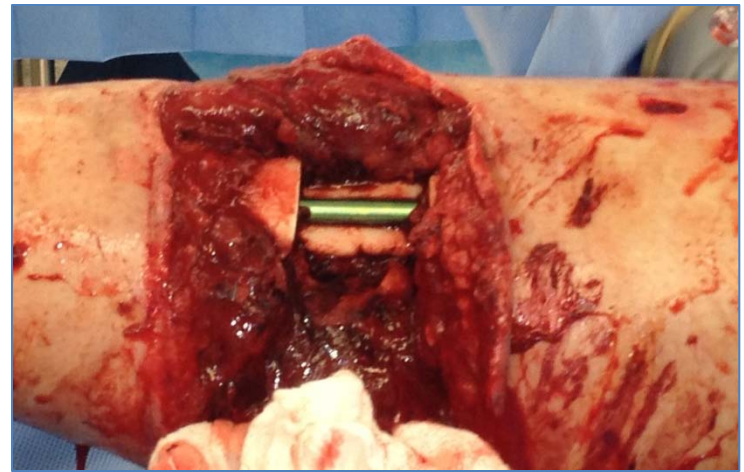
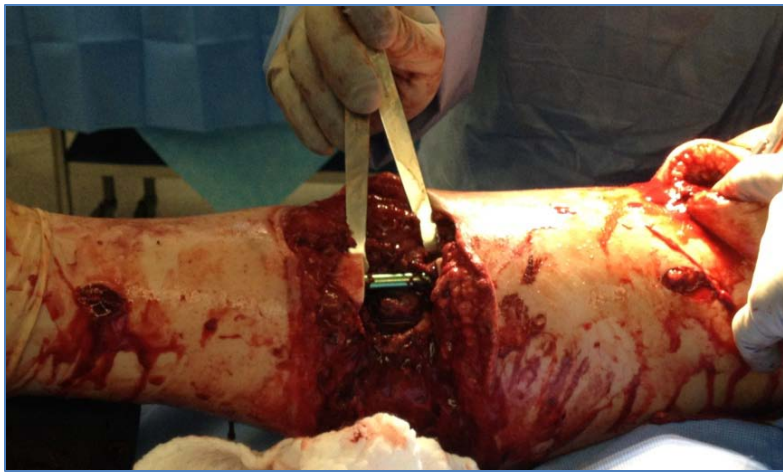
Extracorporeal Fabrication of PMMA Spacer for Masquelet Bone Defect Reconstruction.

- Easy to create uniform size & shape
- Cools before being implanted
- Easy to remove without damaging membrane



Fashion over tube of greater diameter than previously inserted tibial nail. (A drill sleeve for interlocking screw is shown here.) Cut both sides of the spacer with a scalpel before the cement hardens (as above).

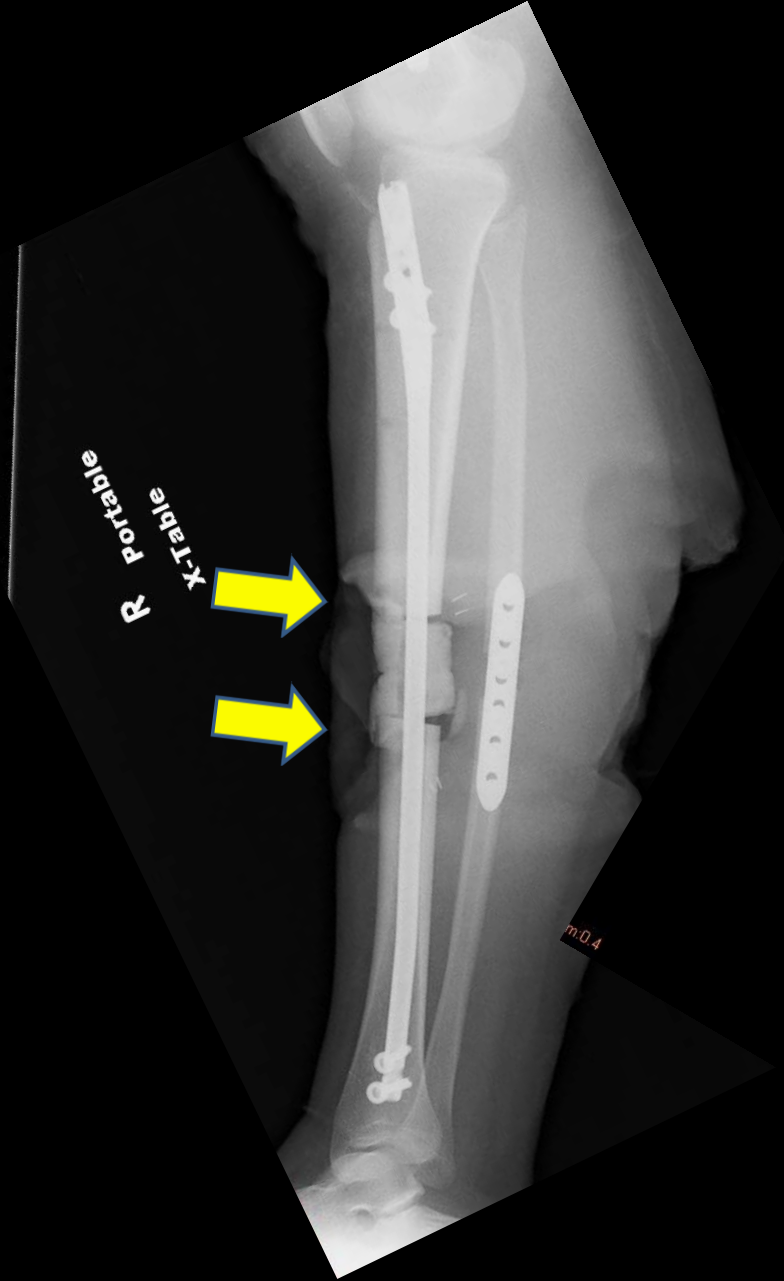




Introduce both spacer halves separately



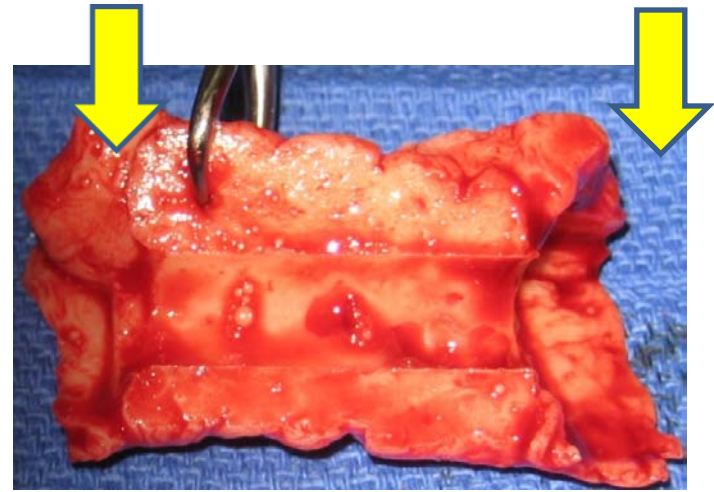
Lash with circumferential suture. Add PMMA "caps" at both ends



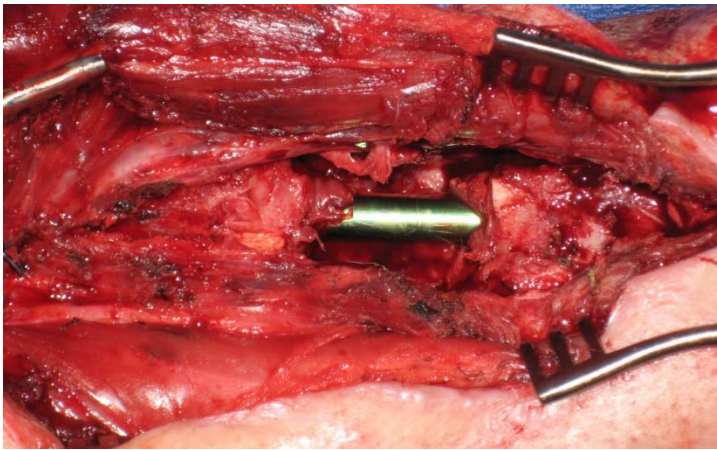
Spacer in place. Notice anterior caps on lateral view (arrows).



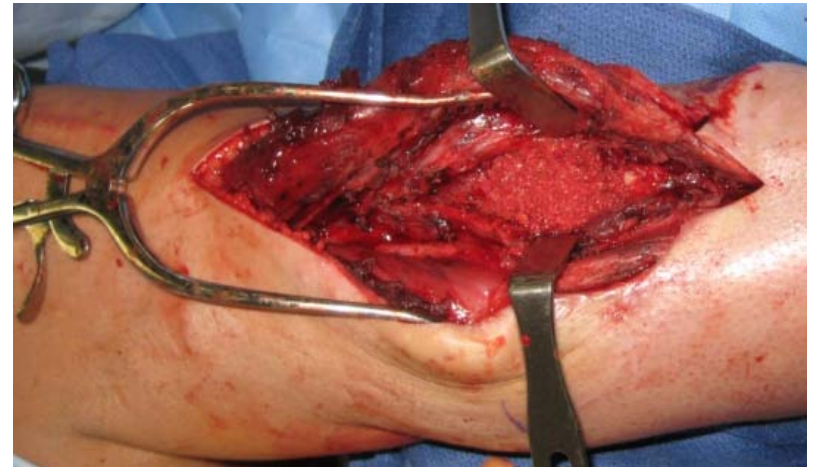
Atraumatic extraction of spacer



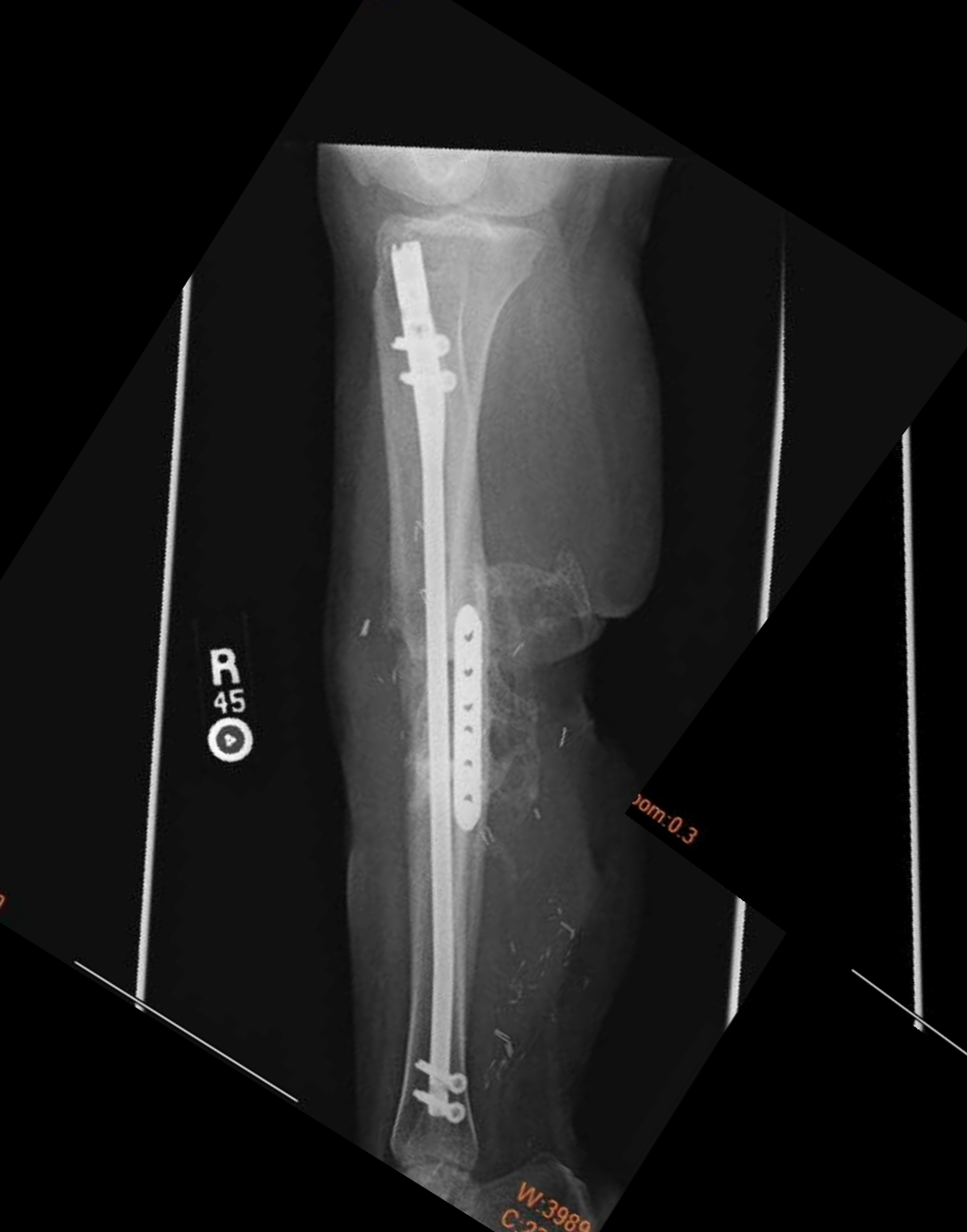
“Caps,” covering gaps between bone and spacer, remain intact



Membrane is preserved



Autologous graft – don't overstuff it



2 months post-op....early integration of bone graft