

Transtibial Amputation with Extended Flap and Bone Bridging

Bandaging:

Apply non-stick gauze

Apply open 4x4 gauze:

Then 4x4 gauze is opened up and carefully layered over the amputation site so as not to form a large single mass of bandages that could potentially shift in position and cause a pressure point inside the cast.

Apply fluff gauze

Roll on amputation sock:

The sock helps to shape the limb and minimize the post-operative edema.

Apply cast padding:

Cotton cast padding is then applied over the amputation sock to further pad the amputation site. It is applied both above and below the drain.

Place reticulated foam end-pad:

Helps to control edema distally.

Place patellar pad:

The patellar pad is placed over the patella to identify the location for the patellar cut as the last step in the final casting procedure.

Tibial crest pad placement:

Tibial crest pads are placed over the anterior-medial and anterior-lateral tibial flare regions. These two regions are loaded in a traditional transtibial prosthetic socket. Padding helps to protect the tibial crest and push the tibia back away from the cast to protect the skin over the distal end of the tibia. The narrow pad goes on the lateral side to avoid pressure on the peroneal nerve.

Two rolls of 5" elastic gauze plaster are applied:

Two rolls of plaster with elastic gauze are used for the initial layers of the cast to both mold the amputation site and to compress the reticulated foam distal end-pad. Care must be taken to not wrap circumferentially as to avoid constricting the limb.

Apply a 5-ply plaster splint:

A 5 ply plaster splint is added to strengthen both the *medial* side of the knee area and the *distal* end of the cast.

Two additional 6" regular cast material rolls applied

Create 3-5 degrees of flexion:

The limb is laid onto a pillow to create 3 to 5 degrees of knee flexion, avoiding hyperextension of the knee and facilitating cast molding.

Supra-condylar mold:

A supra-condylar mold is applied to contour the cast above the femoral condyle to control rotation and prevent the cast from falling off the patient. The larger the patient, the larger the supra-condylar mold.

Cut out patellar pad :

The patellar area of the cast is cut out to provide a landmark to assure the nurses, therapists, and physicians that the cast is indeed located properly and has not rotated or moved distally. Leave the sock and padding over the patella. Feather the edges for comfort.

