

## Skin Incisions and Flaps

### Draw skin incisions and flaps:

The skin incisions are drawn out based on the available soft tissue, and the level of the MT bone cuts will also be based on the tissue available.

1. **Lateral:** Identify the lateral malleolus, the lateral side of the 5 th MT head, and the lateral aspect of the base of the 5 th MT. The lateral incision is on a line between the 5 th MT head and the lateral malleolus and goes just dorsal to the base of the 5 th MT.
2. **Medial:** Identify the medial malleolus and the medial edge of the 1 st MT head. The medial incision is on a line between these two points.
3. **Plantar & Dorsal:** The plantar and dorsal incisions are drawn out to the level that will preserve relatively healthy tissue and remove the damaged tissue.

In this particular case of trauma, the plantar tissue is better preserved than the dorsal tissue. That is the optimal situation because it allows a slightly longer plantar flap than dorsal flap. In many cases the flaps are by necessity approximately equal in length.

### Aesanguinate and Tourniquet:

If there is no infection or tumor, aesanguinate the leg then inflate the tourniquet.

### Skin incisions:

The skin incision should be made in a decisive fashion to provide a clean and pure incision through skin, subcutaneous tissue, down to fascia and bone. One should avoid feathered or beveled edges, and avoid irregularly cut surfaces that can lead to devitalized tissue that may be a focus for non-healing or infection.

### Elevation of the dorsal flap:

The dorsal flap is elevated directly off the top of the MT bones. This provides a flap of maximum and uniform thickness. The flap must be elevated back far enough to provide dorsal access to MT 1-5 at the level of the bone cut and allow for the contour or slope of the cuts which slope medially in the 1 st MT and laterally in MT 3-5.

#### **\*Do NOT try to elevate the Plantar Flap off of the MTs**

The plantar and dorsal flaps are treated differently. While the dorsal flap can be easily elevated off of the tops of the MT, the goal for the plantar flap is different. If possible, it is wise to attempt to keep the interosseous tissue with the plantar flap. This is very difficult to do by dissecting the flap off of the bones, but is far easier to do by first cutting the MTs, and then carefully dissecting each MT up off of the plantar flap in a proximal to distal direction, carefully preserving the tissue between the MTs.