

Abdominal Pedicle Flaps To The Hand And Forearm



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Chapter Six: EVOLUTION OF THE PATTERN DESIGN

My experience with flap design began with freehand outlines of the expected needs after the initial debridement of the wounds. Rulers and calipers were used to get a more accurate measurement. Briggs, in 1900, used a paper pattern, but it was more or less a freehand sketch of the area and was enlarged by a percentage all around to allow for "shrinkage" of the flap. Pierce and O'Connor, in 1937, emphasized the need to match, as closely as possible, the tissue thickness and the exact size and shape of the flap to the wound.

After using paper wrapping from sterile gloves, I decided that clear plastic used to package surgical drapes worked better. It can be laid over the wound after debridement and stapled in place. The borders of the new wound can then be traced with surgical markers to outline and trace the borders of the wound very accurately. With this plastic stapled into place over the recipient site, the hand or forearm can then be placed in a comfortable position on the abdomen, and the pedicle can then be traced, as needed, to form the flap. The base of the flap is then stapled, as shown in Fig. C chapter 4 and the staples on the wound are removed allowing the clear plastic then be set against the abdominal wall to allow for a very accurate tracing of the wound onto the skin. Ink tattoo dots can then be placed on the intended flap with corresponding dots on the recipient site to make alignment and insertion of the flap easier.

After carefully checking the incision lines drawn on the skin with the plastic pattern and the debrided wound, the flap is elevated and prepared for insertion onto the recipient wound. Because the pattern has been very accurately measured before raising the flap, there is no concern or question about the orientation or placement of the flap on the recipient wound. Furthermore, the exact matching of the flap to the wound eliminates any undo tension, kinking, or torsion of the flap thereby reducing the chances for ischemia.