Groin Flap
This is a patient with a history of thumb avulsion that is non-replantable. He will eventually require a toe transfer, but a distant pedicle groin flap is planned for primary coverage.
The ASIS, inguinal ligament, and femoral vessels are marked by palpation. The SCIA emerges from the femoral vessels about 2cm below the inguinal ligament, and then courses towards to the ASIS. This axis is marked, and confirmed with the doppler. The flap is outlined on this axis, with its width and length determined by a template of the defect, and a pinch test.
The flap is raised from lateral to medial in a suprafascial plane until the lateral edge of the sartorius. The fascia of the sartorius is incised and dissection is continued subfascially to protect the SCIA which runs just superficial to this. Once the medial border of the sartorius is encountered, dissection is complete. The pedicle is not skeletonized, but rather left protected in the sartorius fascia and surrounding fat as shown here.
The donor site is closed, and the flap is tubularized at its base if possible. This should be loose, and the flap vascularity should be continually assessed during this process.
The hand is brought to the flap, and the flap is inset into the defect. Surface area contact between the flap and defect should be maximized to favor vascular ingrowth.
Prior to emergence from anesthesia, an abdominal binder is placed around the arm to keep this apposed to the groin. The flap is maximally at risk for avulsion during emergence from anesthesia.
In this case, the groin flap was used to reconstruct a degloved ring finger for which soft tissue replantation was not possible.
After raising the flap, the ring finger is wrapped in the groin flap.
After flap division at three weeks, the groin flap is well vascularized, but very bulky.
Three debulking surgeries were performed in this case, and the ring finger has been reduced to an acceptable size.