RECONSTRUCTIVE SURGERY IN MSF PROJECTS

PART 5



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PRECAUTION TO PREVENT FLAP FAILURE

- 1. CHECK IF THE VASCULAR PEDICLE OR FLAP BASE IS UNDER TENSION
- 2. ARE WE DOING TOO MUCH SUTURING, IS THE FLAP UNDER TOO MUCH TENSION
  (ALWAYS REMEMBER LEAVING SMALL GAPS OF 5-10MM IN A BIG TRAUMA WOUND IS NOTHING TO BE ASHAME OF.)
- 3. ARE THE DRESSING AND BANDAGE LOOSE ENOUGH SO AS NOT TO JEOPARDIZE THE VENOUS RETURN
- 4. IS IMMOBILIZATION NEEDED TO LESSEN THE TENSION ACROSS THE FLAP
- 5. FOR DISTANT FLAP, HAS THE IMMOBILIZATION BEEN SECURED, DO REGULAR CHECKING FOR INFECTION IN THE EXPOSED FASCIAL PART OF THE FLAP AND MAKE SURE THERE'S NO TRACTION NOR KINKING AT THE FLAP BASE
- 5. HAS THE FLAP CLEARLY MARKED ON THE SURFACE OF THE DRESSINGS SO AS TO ALLOW IPD STAFFS TO KNOW WHERE ABOUT IS THE FLAP
- 6. HAS THE FLAP AREA BEEN ELEVATED FOR AT LEAST 48 HOURS
- 7. HAS WE ENSURE THAT THE PATIENT IS NOT LYING ON THE FLAP BY GIVING CLEAR INSTRUCTION TO OUR IPD STAFFS

WHAT TO DO IF THE FLAP BECOMES SWOLLEN AND BLUISH WITHIN HOURS AFTER THE OPERATION

- *A **SWOLLEN, BLUISH** FLAP* INDICATES A PROBLEM WITH CIRCULATION INTO OR OUT OF THE FLAP. USUALLY IT IS A **VENOUS** (I.E., OUTFLOW) PROBLEM. MAKE SURE THAT THE PATIENT IS **POSITIONED PROPERLY** AND THAT **NOTHING IS COMPRESSING OR PULLING ON THE PEDICLE**. **LOOSEN SURROUNDING DRESSINGS AND TAPE**. SOMETIMES IT IS **HELPFUL TO REMOVE A FEW STITCHES** TO ENSURE THAT THE FLAP IS **NOT UNDER TOO MUCH TENSION**.
- ELEVATE THE FLAP AREA FOR 48 HOURS
- BE SURE THAT ***NO FLUID HAS COLLECTED*** **UNDER THE FLAP**. ANY COLLECTION OF FLUID REQUIRES DRAINAGE. PLACE A CLAMP BETWEEN SOME OF THE SUTURES, AND SPREAD THE SKIN EDGES. THIS TECHNIQUE HELPS TO DRAIN THE FLUID.
- ENSURE **ADEQUATE** ***PAIN CONTROL***. PAIN STIMULATES THE SYMPATHETIC NERVOUS SYSTEM, WHICH DECREASES BLOOD FLOW THROUGH THE PEDICLE

Case 36











Skin of distal & proximal part of a perforator flap died
and sloughed off but fascia well attached to the wound with
cellulitis in surrounding skin which resolved after 2 days' cloxacillin
The skin grown back on both proximal & distal exposed fascia




















Dermal part of the flap turned dark & black but there's no sign of infection, also fascia was well attached to the wound & to the surrounding edge; so only COD was done; then the dead skin fell off with new skin grown beneath it after 5-6 weeks









Dermal part of the flap turned black after tight dressing by IPD nurse, there's no sign of infection & the fascia was well attached to the wound & the surrounding edge. Dead skin fell off exposing new skin after 5 weeks









Crush injury (L) hand with exposed bones and tendons, patient refused hypogastric flap nor groin flap so reverse radial forearm flap was done for him. Donor site at forearm was closed too tight leading to venous congestion to distal limb. Skin of flap died but fascia intact and it help the wound healed underneath then we removed the overlying fascia and do COD for the remaining much narrowed wound. The right most photo showing a very narrow remaining wound with no bone nor tendon exposed

WHAT TO DO IF PART OF THE FLAP DIES

- A FEW DAYS AFTER THE PROCEDURE, YOU MAY NOTICE THAT A PART OF THE FLAP HAS BECOME PURPLISH. A PURPLE COLOR INDICATES INADEQUATE CIRCULATION TO THAT PART OF THE FLAP, AND THE TISSUE MAY EVENTUALLY DIE.
- IF THERE IS **NO EVIDENCE OF INFECTION**, YOU MAY **SIMPLY LEAVE THE FLAP ALONE**. WITH TIME, THIS TISSUE WILL DEMARCATE AND DIE AND THEN SEPARATE OR YOU MAY HAVE TO CUT OFF THE DEAD TISSUE. WHILE THIS PROCESS IS OCCURRING, **THE UNDERLYING TISSUES WILL HEAL** FROM THE SKIN ELEMENTS AT BASE OF HAIR FOLLICLES AND SEBACEOUS GLANDS IN THE FASCIA.
- IF THE SKIN PART OF THE FLAP DO DIED AND SLOUGH OFF, OR INFECTION NEEDING DBR THEN ONE **MIGHT NEED TO DO SG ON THE REMAINING FASCIA AND THE RESULTANT WOUND AFTER WHICH IS AS GOOD AS THE ORIGINAL FLAP AS SUBCUTANEOUS TISSUES ARE INTACT.**

REGIONAL FLAPS

- SURAL FLAP
- POSTERIOR CALF FLAP
- SUPEROMEDIAL THIGH FLAP
- GLUTEAL THIGH FLAP

DISTANT FLAPS

- HYPOGASTRIC FLAPS AND ITS VARIATIONS
- THENAR FLAP
- CROSS FINGER FLAP
- CROSS LEG FLAP
- GROIN FLAP

THEORETICAL TRAININGS

10/2:	**Skin graft revision; keystone flap**
16/2:	**Local Flaps**
23/2:	**Distant Flaps**
1/3:	**Sural flap; Perforator flaps**
8/3:	**Advances in burn scar contracture Part 1**
22/3:	**Advances in burn scar contractures Part 2**
29/3:	**Tendon repairs including tendon transfers**
30/3:	**Basic ultrasound & eFAST**
5/4:	**Pressure ulcer management**
	+ Sacral ulcer Management
6/4:	**Further on eFAST & ultrasound**
19/4:	**Surgeries for Ischial & trochanteric ulcers**
26/4:	**Burn Management in MSF settings**
3/5:	**Hepatobiliary injuries**
10/5:	**Chest trauma in armed conflict**
17/5:	**Posterior Tibial tendon transfer**
14/6:	**Flaps for face & scalp**
21/6:	**Flaps for nose & ear**
28/6:	**Flaps for eyelids**
29/6:	**Vascular emergency: Principle & ER management**
5/7:	**Flaps for lips & commissure**
12/7:	**Management of osteomyelitis in long bone**

THEORETICAL TRAININGS

All the trainings above were done online and they were all recorded, so anyone missed them could watch the recordings at their convenient time. Following is the link to folder: Meet Recordings

https://drive.google.com/drive/folders/1T2I7nhdYIVb7LTtcXwac7Bhsdt3A8ILv?usp=drive_link

Also, we have recorded 11 different types of flap surgeries which were performed in Kilo recently. Following is the link to the folder: Surgery Video

https://drive.google.com/drive/folders/1AeIt2XxQajC0GMEy3qcjRHMpZqrIHD-I?usp=drive_link

Both folders are accessible to anyone with the link and I also made them download enabled.



MEDECINS SANS FRONTIERES