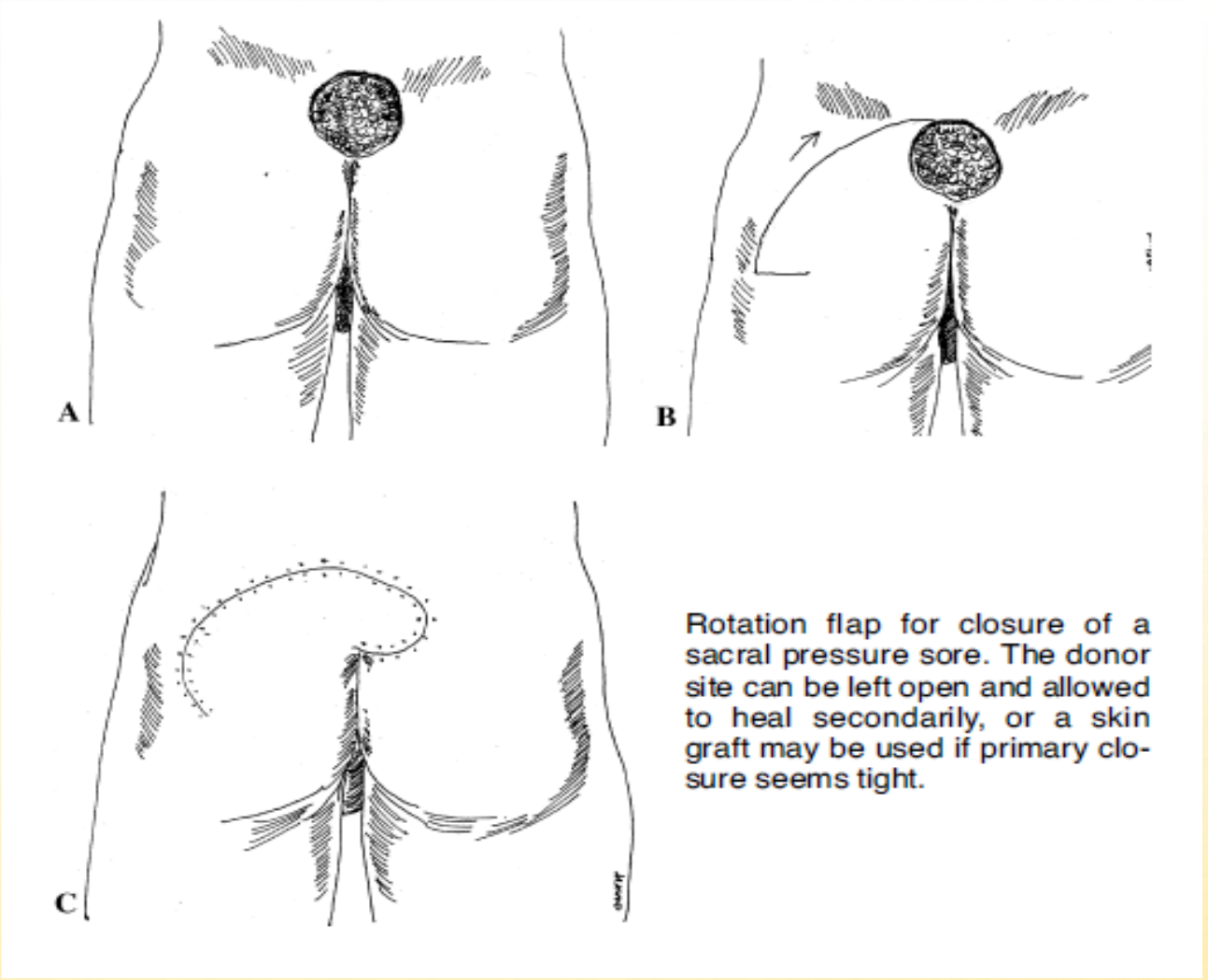
RECONSTRUCTIVE SURGERY IN MSF PROJECTS

PART 3

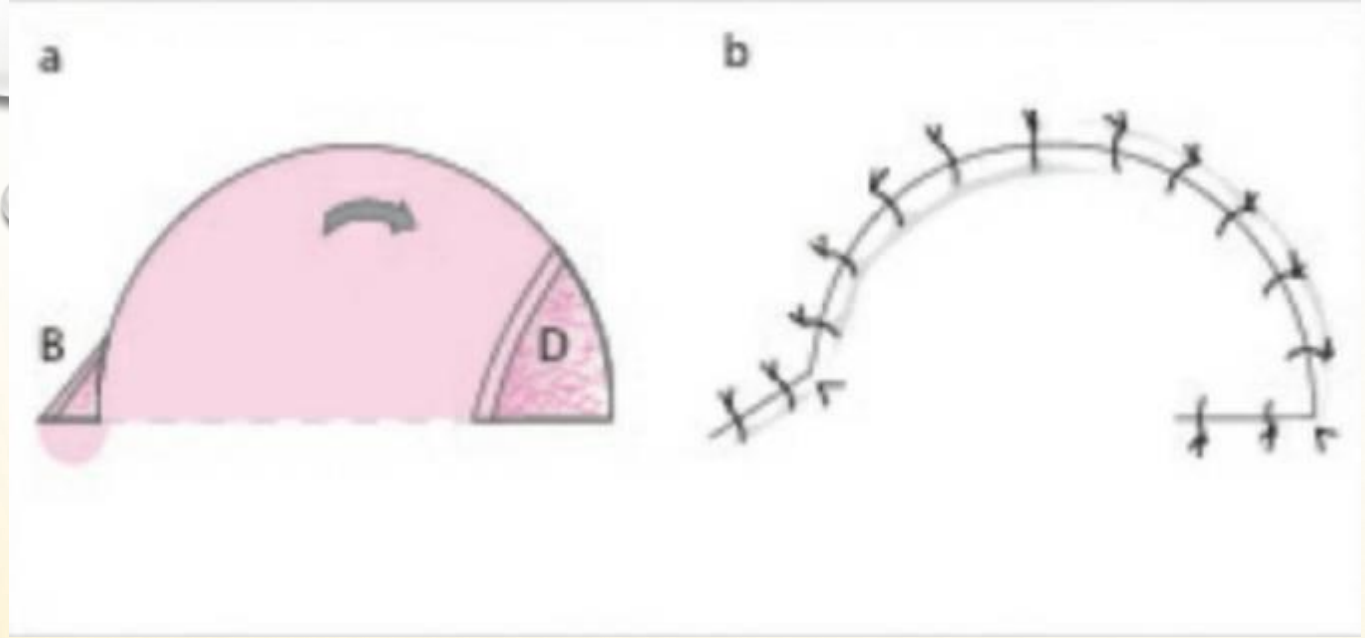


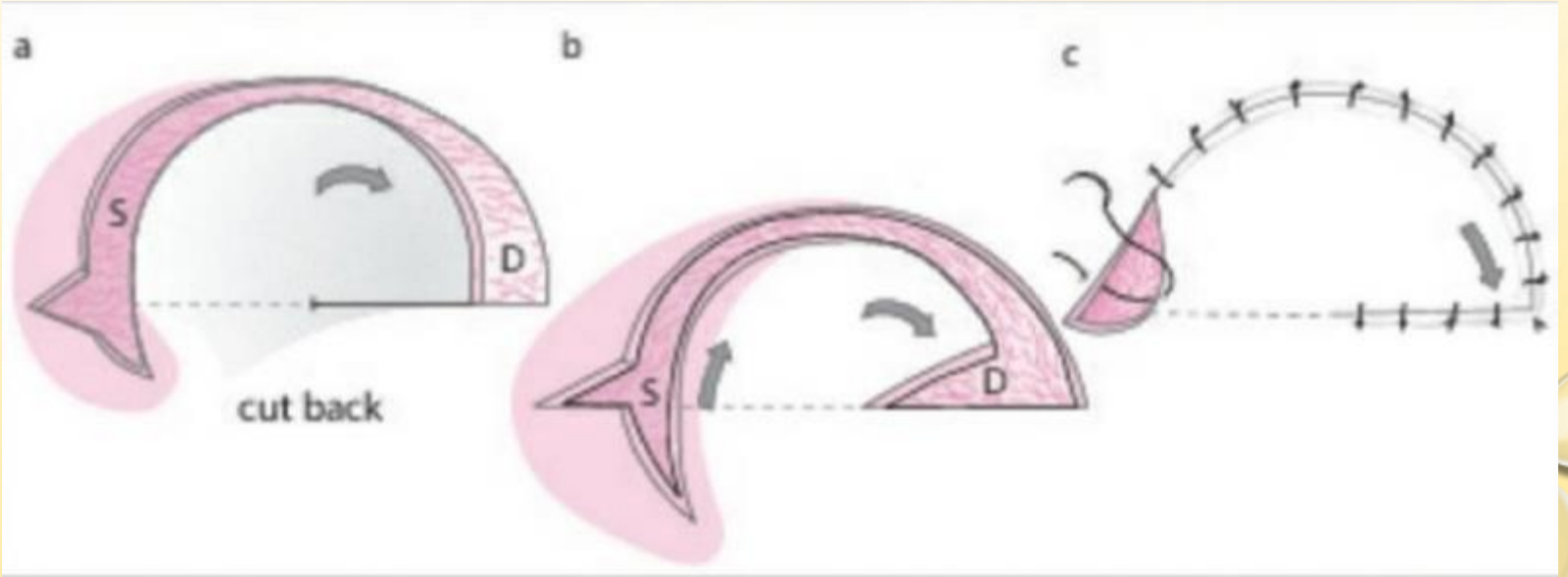
Dr Ryan Ko Chi Cheong

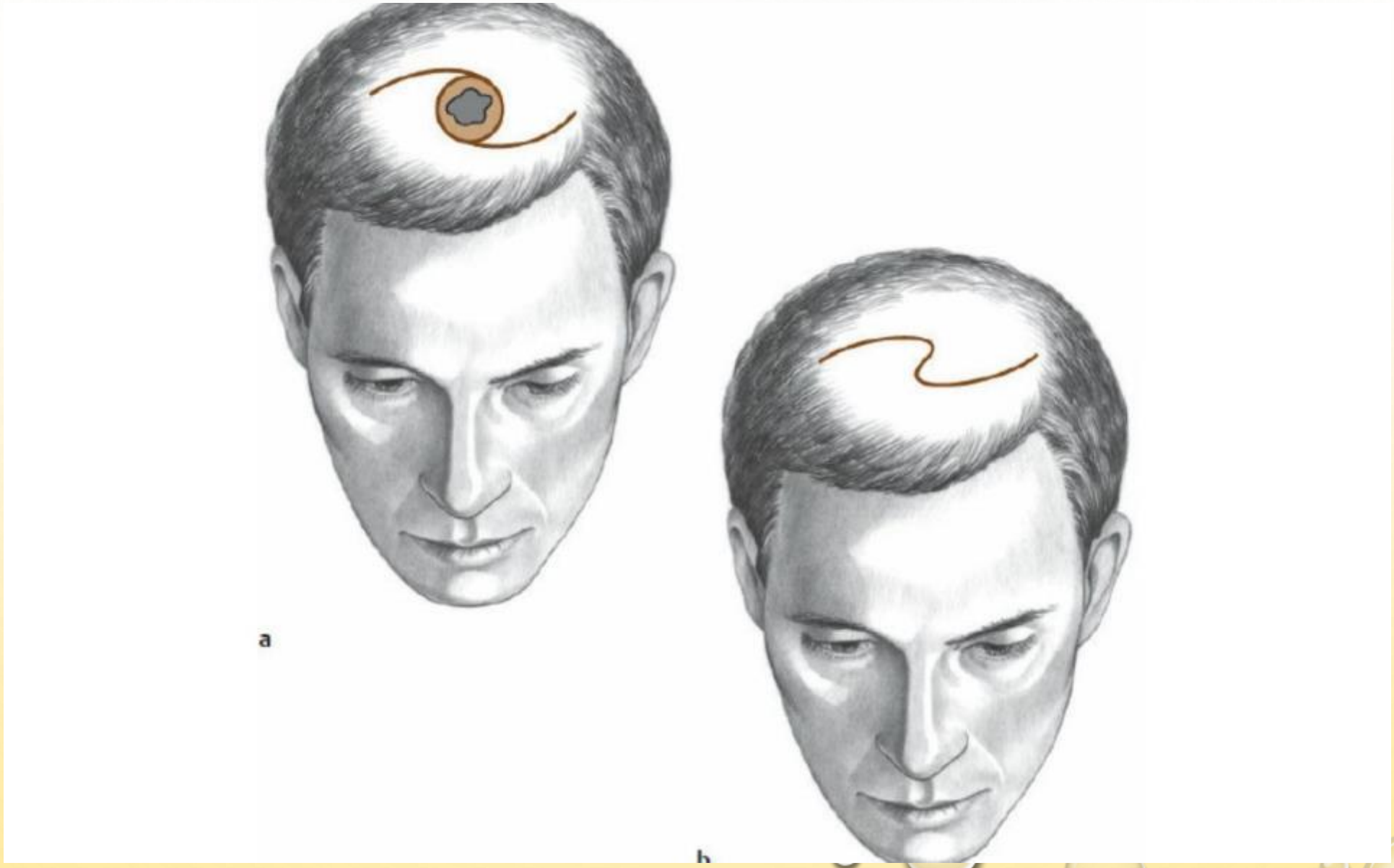
ROTATION FLAPS



- COMMONLY USED FOR COVERAGE OF SACRAL PRESSURE SORES. THIS TYPE OF FLAP CAN COVER WOUNDS OF VARIOUS SIZES.

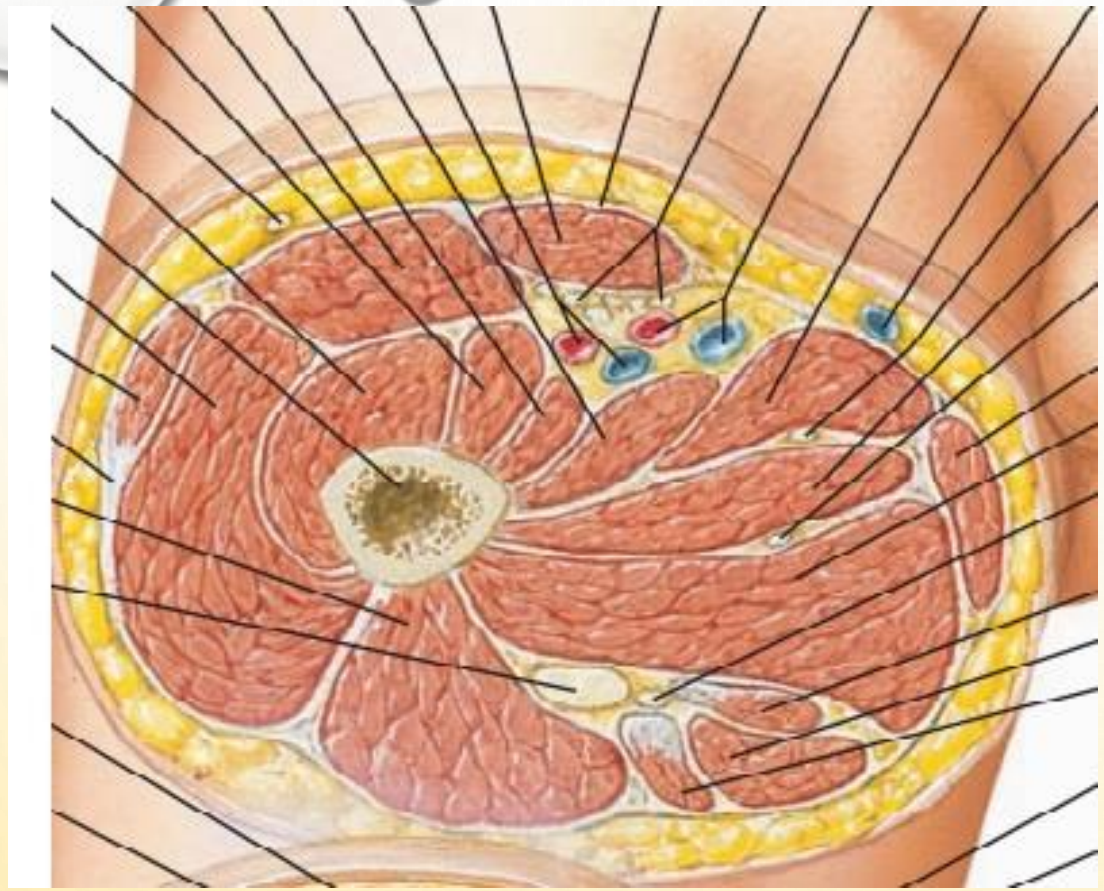

a
b
B
D

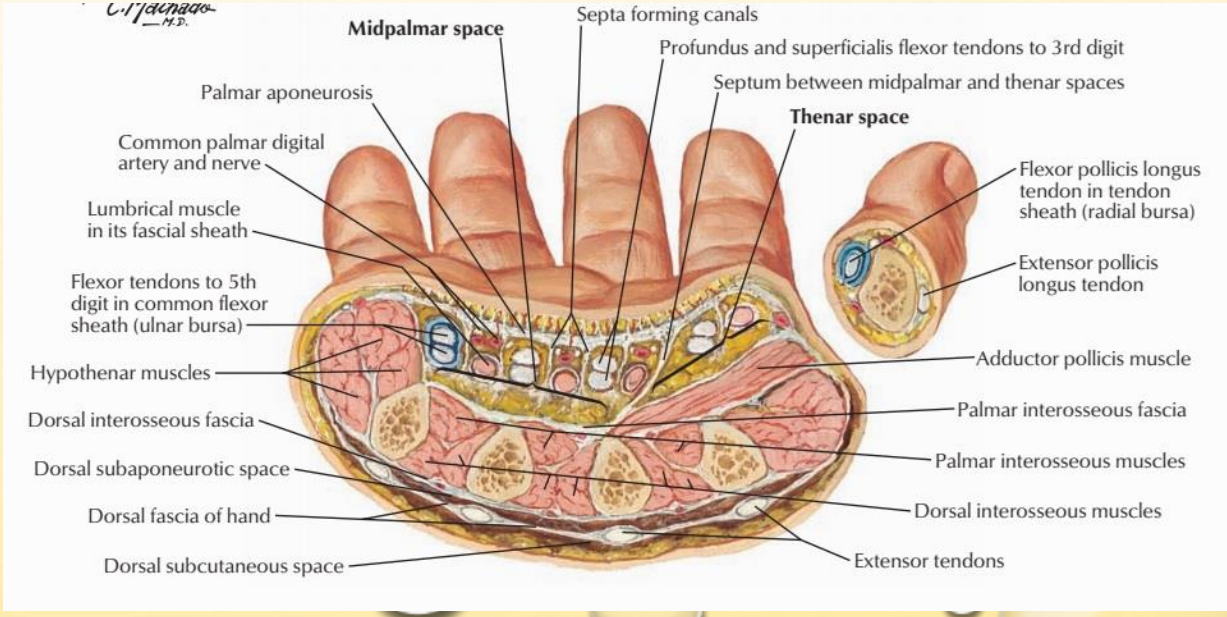

a
b
c
S
D
cut back
S
D


a
b

- ROTATION FLAPS A SEMICIRCULAR FLAP ROTATES TISSUE INTO DEFECT ABOUT A PIVOT POINT
- THE ***FLAP CIRCUMFERENCE SHOULD BE 5 TO 8 TIMES THE WIDTH OF THE DEFECT***. TISSUE REDISTRIBUTION ENABLES DIRECT CLOSURE OF THE DONOR SITE.
- **A BACK CUT CAN BE USED TO MOVE THE PIVOT POINT TO REDUCE TENSION** .
- BILATERAL ROTATION FLAPS ARE USEFUL TO CLOSE LARGE DEFECTS BY USING THE COMBINATION OF ROTATION FROM BOTH FLAPS TO MEET IN THE MIDDLE OF THE WOUND . LARGE ROTATION FLAPS CAN BE USED ON THE FOREHEAD AND CHEEK FOR LARGE DEFECTS; HOWEVER, EXTENSIVE DISSECTION OF THE FLAP HAS TO BE PERFORMED TO GET AN ADEQUATE RANGE OF MOVEMENT TO THE FLAP

- 1. *DRAW THE FLAP BEFORE* MAKING ANY INCISIONS SO THAT YOU CAN MAKE CORRECTIONS.
- 2. DETERMINE *THE SITE OF GREATEST LAXITY* IN THE SURROUNDING TISSUES.
- 3. ***MAKE THE FLAP LARGER*** **THAN YOU THINK YOU NEED**.
- 4. EXTEND THE WOUND IN A CURVED FASHION UNTIL YOU THINK THE FLAP CAN BE MOVED INTO THE DEFECT. BE SURE THAT ***THE FLAP HAS A WIDE BASE (AT LEAST 8–10 CM)***.
- 5. *SEPARATE THE FLAP FROM THE UNDERLYING TISSUE ATTACHMENTS, AND UNDERMINE* THE FLAP PEDICLE AND SURROUNDING SKIN EDGES
- 6. IF NECESSARY, A *SMALL BACK CUT* CAN BE MADE AT THE LATERAL EDGE OF THE BASE OF THE FLAP TO HELP IT TURN ONTO THE WOUND. DO NOT NARROW THE BASE BY MORE THAN 1–2 CM.
- 7. *LOOSELY SUTURE THE FLAP* IN PLACE, **AVOIDING TENSION ON THE PEDICLE**. PLACE A FEW DERMAL SUTURES, AND THEN DO AN INTERRUPTED SKIN CLOSURE. BE SURE THAT THE SKIN CLOSURE IS NOT TIGHT. IT IS BETTER TO HAVE SMALL GAPS IN THE SKIN CLOSURE (WHICH WILL HEAL) THAN DO A TIGHT CLOSURE AND LOSE PART OF THE FLAP.
- 8. SOMETIMES THE *DONOR SITE* MAY NEED TO BE CLOSED WITH A SPLIT-THICKNESS SKIN GRAFT OR ALLOWED TO HEAL SECONDARILY.




Midpalmar space
Septa forming canals
Profundus and superficialis flexor tendons to 3rd digit
Septum between midpalmar and thenar spaces
Palmar aponeurosis
Thenar space
Common palmar digital artery and nerve
Lumbrical muscle in its fascial sheath
Flexor tendons to 5th digit in common flexor sheath (ulnar bursa)
Hypothenar muscles
Dorsal interosseous fascia
Dorsal subaponeurotic space
Dorsal fascia of hand
Dorsal subcutaneous space
Flexor pollicis longus tendon in tendon sheath (radial bursa)
Extensor pollicis longus tendon
Adductor pollicis muscle
Palmar interosseous fascia
Palmar interosseous muscles
Dorsal interosseous muscles
Extensor tendons

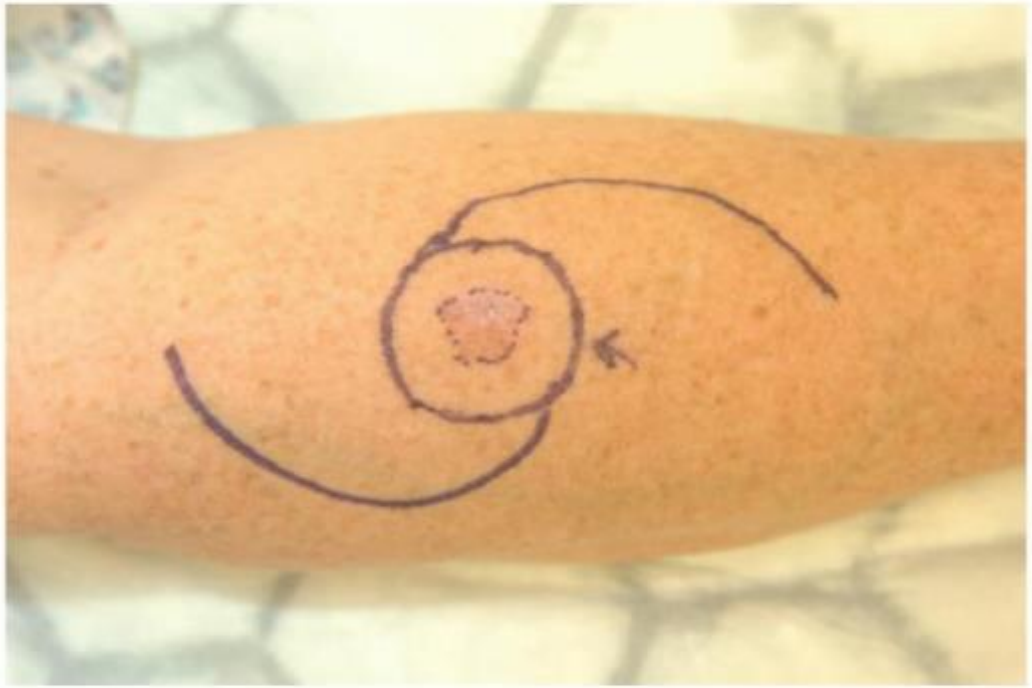
Kilo, Yemen 2019





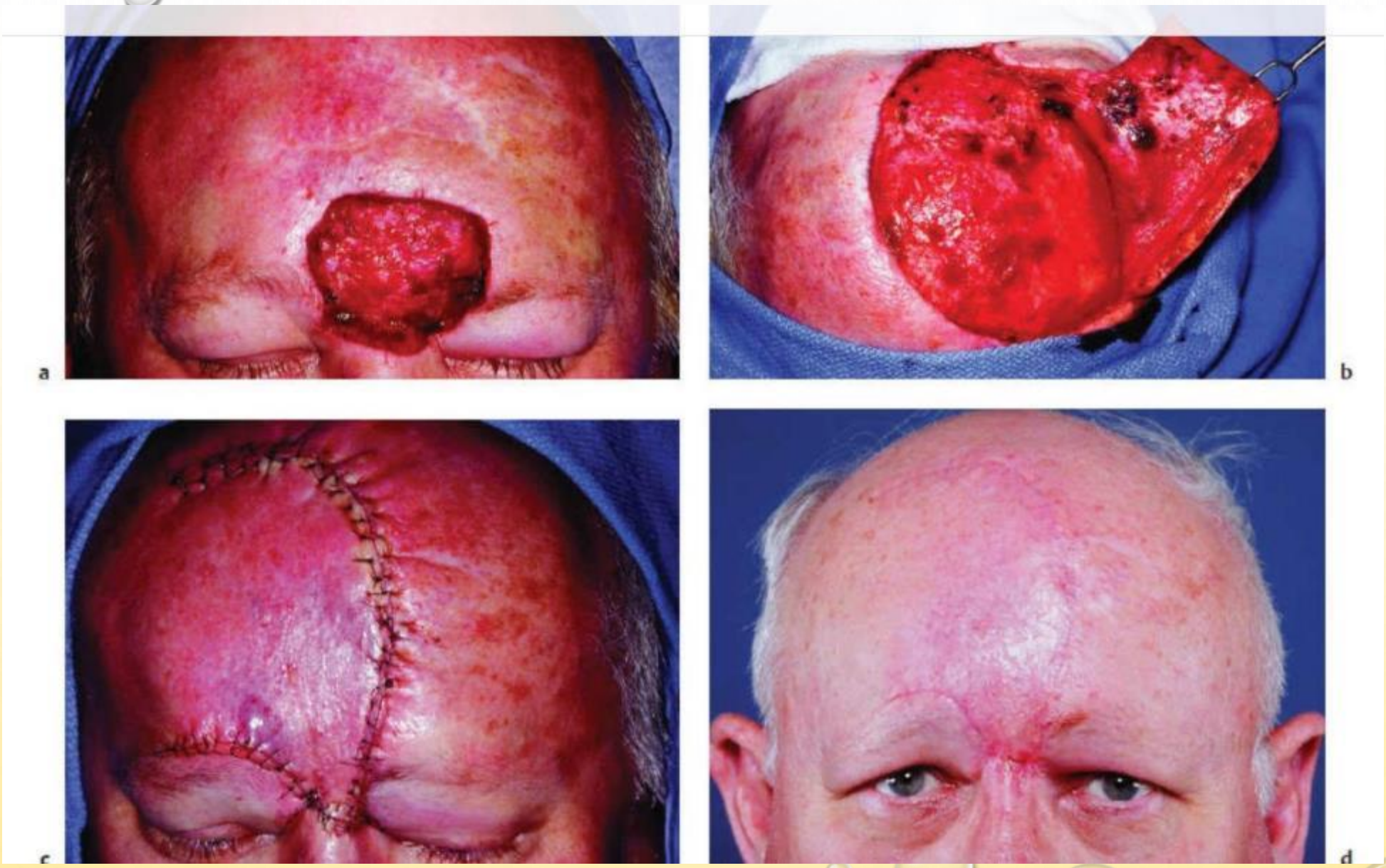


Scalp ulcers in a newborn baby, rotational flap was done picking up both ulcers, wound healed nicely






a
b


a
b
c
d

Other common local flaps:

Rhomboid flap

Bilobed flap

Bipedicle flap

Z-plasty