

APPENDIX 2

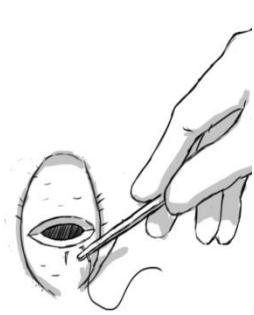
GENERAL SURGICAL TIPS FOR FISTULA SURGERY

- (1) SPECIAL GRIPS OF NEEDLE:** There are two grips commonly used in fistula surgery which are not often used in general surgery. In both of these:
- The surgeon's hand and elbow are held up so that the handle of the needle holder is on top. To do this, you have to hold your right elbow (and hand) **up and out** (laterally) in the air as seen in Figure E.
 - Do not put your fingers or thumb through the needle holder but grasp it with the palm of your hand (pen-like grip). This allows for more mobility and rotation which you will need.

Backhand grip: This grip is used especially when stitching on the left side of the patient i.e. when going from patient's left to right (see Figure A and B).



A: Mount the needle so the point is facing to your right (when holding mid-prone)

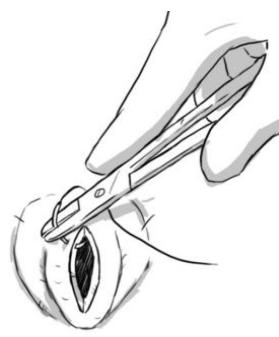


B: Shows the backhand grip being used. The needle-holder is held like a pen.

Reverse forehand grip: If you want to stitch going from the patient's right to left. This is mainly used on the right side (see Figure C and D)



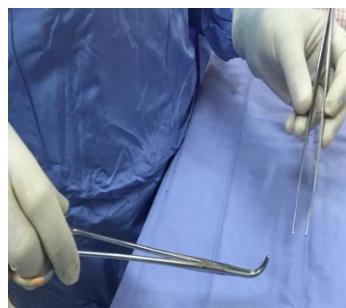
C: Mount the needle in the usual way so the point is facing to your left.



D: Shows the reverse forehand grip with needle-holder held on top.



E: For both the backhand and reverse forehand grip, keep your right elbow up and out as you hold the needle-holder like a pen.



F: Shows the right-angled forceps held in the right hand and dissecting forceps held in the left hand.

(2) DISSECTION

Dissection during abdominal VVF or ureteric fistula repair is often best achieved by using:

- (a) A right-angled forceps in your right hand to dissect out the tissues to be cut.
- (b) Dissecting forceps/pickups in your left. By displaying the tissues between the tips of the right-angled forceps, your assistant can then cut them for you with either scissors or cautery.

(3) IF YOU WANT TO KEEP A KNOT TIGHT

and you are tying by instrument, use a combination of:

- Put a double throw on the first loop and tighten by moving right hand under left towards the left so that it is square.
- Once the first loop is tied, rotate the two ends 180 degrees to lock them by moving the right hand back under the left hand towards the right.
- Then to further keep the first throw tight as you tie the second, your assistant holds one end tightly (the short end without the needle) by pulling it with artery forceps. At the same time, you hold the long end (with the needle) tight with your hand. Now tie the second throw.

If hand tying knots: Do not hold instruments especially in critical situations as it is difficult to judge tension and control the knot if you do. Always push the knot down with your index finger, and only use an instrument as an extension of the suture.

If the knot has become loose (air-knot): Instead of re-doing all the suturing, take another bite (usually proximally) and tie again. Inspect the knot carefully to make sure it is now tight.