

Practical Pearls in Surgery

"Practical Pearls in Surgery" is a series designed as a forum to allow surgeons to share concepts that help them diagnose, treat, or perform a procedure faster or better or at less cost. Please use the entry form provided to submit a "pearl" that would be of benefit to surgeons and their patients.

—The Editor

CVC CATHETER PLACEMENT

Using a peel-away introducer to place a soft, elastic central venous catheter into the right atrium can be facilitated by placing the patient in the reverse Trendelenberg position after the catheter has been floated into the subclavian or jugular vein. Gravity favors the flow of blood and the catheter into the SVC and right atrium.

SOFT CATHETER INSERTION

When floating a soft, flexible catheter into the SVC via a peel-away introducer, changing the patient from the Trendelenberg position to a reverse Trendelenberg position allows gravity to work in the surgeon's favor, facilitating the turn into the SVC and increasing venous return.

— Barry J. Browne, M.D.

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NONSLIP ONE-HAND SURGICAL KNOT

Keeping the first throw of a reef knot tightly held, especially in a deep cavity, is a surgical technique that can be perfected with practice. An ideal knot, especially for endoscopic surgery, can be tied on the surface and slipped down, remaining secure until a second knot is tied. Ready-made commercially-available Roeder knots can be used for this purpose, but they are rather costly [Steele RJC: Roeder knot for tight corners in conventional abdominal surgery. *J R Coll Surg Edinb* 36:412, 1991]. Instead, a noose-type knot can be tied with one hand.

Hold one end of the thread between the thumb and index finger. Loop the thread around the middle and ring fingers and proceed as when tying a usual knot. Hook the other half of the thread with both the middle and ring fingers. Hook the first thread with the middle

finger and clasp it between the middle and ring fingers, pulling it through the second and first loops in that order. Before pulling, the index finger and thumb must release the tip. Pull the knot tight and slide it down. It stays tight if only the left end is pulled. Two reef knots will secure it further. A monofilament material such as Ethilon or Prolene slides well.

— Jayant S. Vaidya, MS, DNB

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Please see the figure on the next page

EASIER GROIN CLOSURE

Following dissection in the femoral region for a vascular procedure, restoring the tissues and skin in a cosmetic and tension-free fashion may be difficult. Placing two stay sutures at the ends of the incision makes the repair much easier. Two sutures are placed at each end of the incision, and an assistant elevates and pulls the sutures in opposite directions. The wound is closed in layers, and the two stay sutures are removed on completion of the closure. This technique shortens the time required for wound closure and provides a superior cosmetic result, especially in heavier patients.

LUBRICATED FOLEY CATHETER PLACEMENT

Bladder catheterization can be more traumatic in an elderly male patient with an enlarged prostate gland than in younger male patients or females. Placement of the Foley catheter can be facilitated by using a syringe to place lubricating jelly into the urethra. In an awake patient, a commercially-available lubricating jelly containing xylocaine can be used. The nondominant thumb and forefinger can be used to gently apply pressure on the glans to keep the jelly within the urethra and bladder.

— A. Abe Saiz, M.D., Antonio Uria, M.D.,

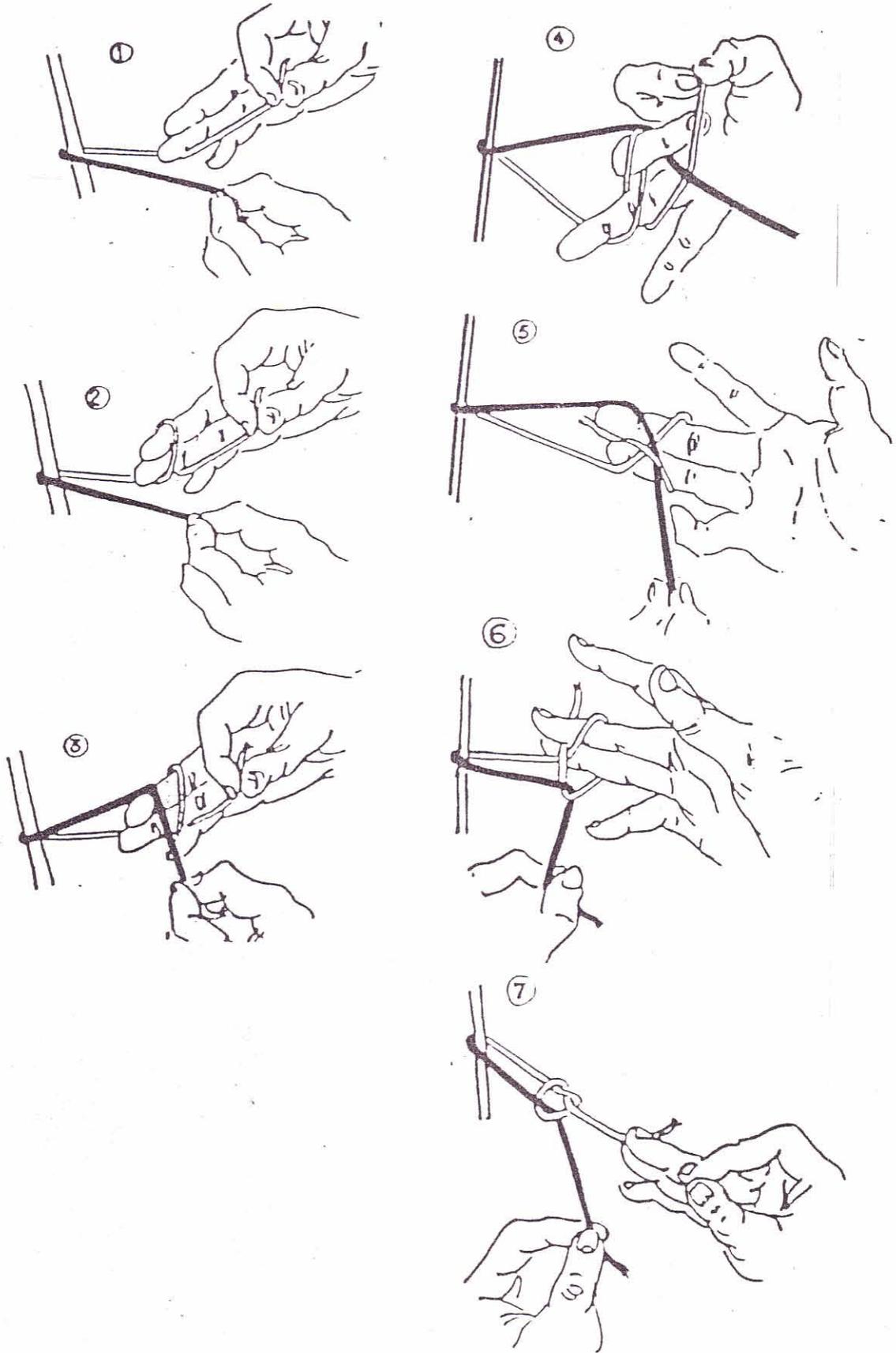
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UNCLOGGING TUBES

Clogged J-tubes, G-tubes, and Dobhoff tubes can complicate postoperative treatment by preventing nutrition, decompression, and other therapies, often with considerable financial consequences.

The steps of the Vaidya knot



Citation:
A new noose type non-slip surgical knot that can be tied by one hand :
JS Vaidya.
Comtemp Surg. Nov 1996. 49 (5): 294

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A NEW NON-SLIP SURGICAL KNOT

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KEY WORDS:

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Citation:

A new noose type non-slip surgical knot that can be tied by one hand :

JS Vaidya.

Contemp Surg. Nov 1996. 49 (5): 294

SUMMARY:

A new non-slip noose type surgical knot which can be tied by one hand, especially for ligatures or sutures in deep cavities, is described.

Citation:

A new noose type non-slip surgical knot that can be tied by one hand :

JS Vaidya.

Comtemp Surg. Nov 1996. 49 (5): 294

INTRODUCTION:

To tie a knot in a deep cavity and to keep it tight is a little problematic. With the new method described, a 'noose type' of knot can be tied with one hand, and held secure. It offers distinct advantages over the earlier methods.

METHOD:

The steps are clearly demonstrated in the illustration.

The essential principles are:

1. Taking a (1st) loop with right middle and ring fingers, (fig. 1 and 2),
2. Forming a second loop with the thread end in the left hand (fig. 3),
3. Passing the right end through the second (fig. 5 and 6), and the first (fig. 6 and 7) loop, one after the other; pull to tighten. This completes the Jayant S. Vaidya knot.
4. Then tie a half hitch and then another to complete a reef knot after the Jayant S. Vaidya knot.

The knot is to be tied at the surface and slipped down and tightened by pulling the thread ends at the surface.

The first half hitch tightens the Jayant S. Vaidya knot further if it has loosened.

A similar but not the same knot can be tied in two different ways:

1. The loop in steps 1 and 2 is taken the other way round, i.e., anticlockwise, or,
2. if both the threads are taken in the loop.

Both these methods will result in a knot with threads

(Contd.....2)

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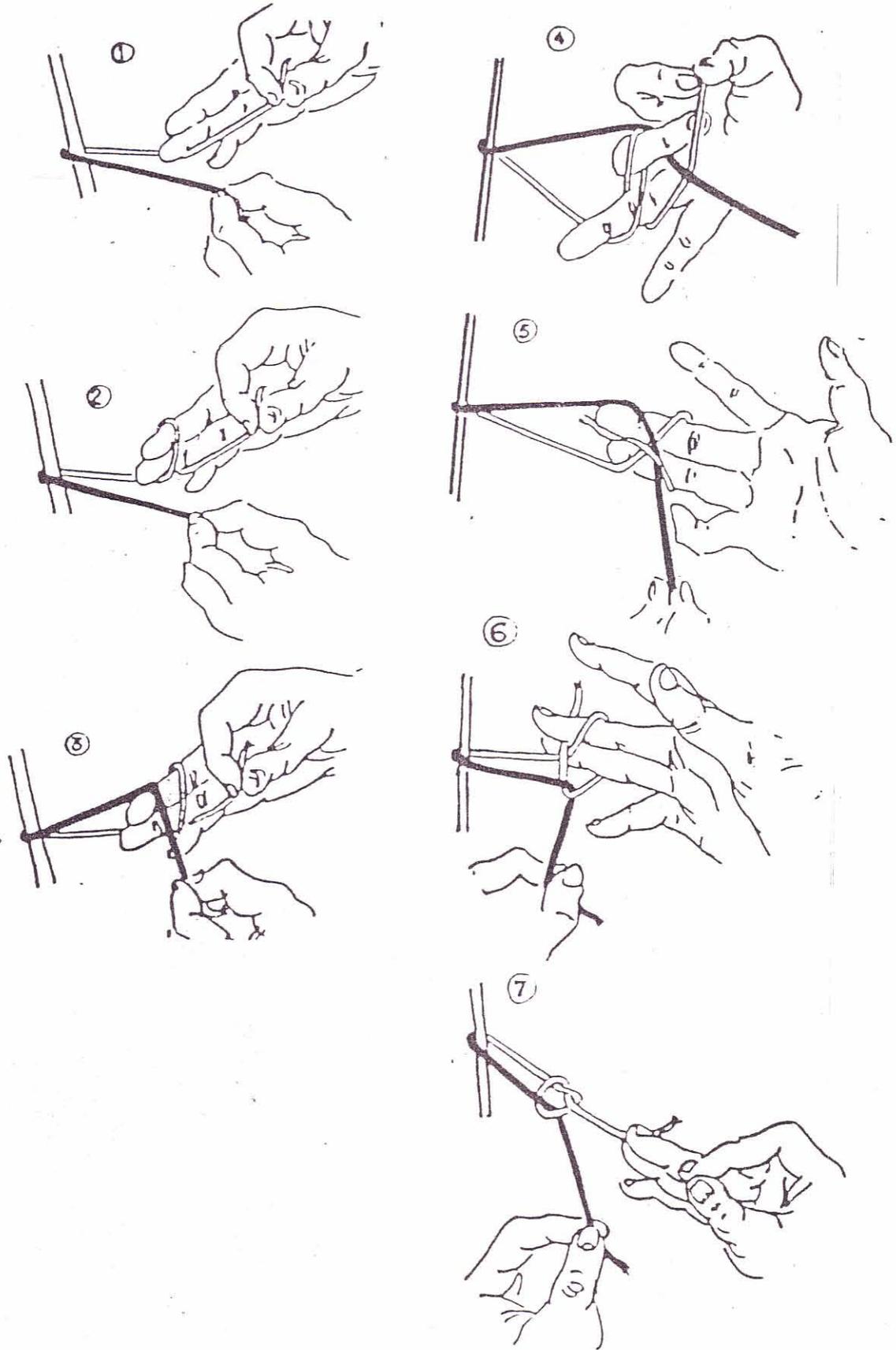
on the same side of the constricting knot; whereas in the Jayant S. Vaidya knot, they are one above and the other below making it and the further half hitch more stable.

To tie this knot one does not have to pass the fingers or forceps into the cavity to tighten the knot as has to be done for a simple reef knot or surgical knot.

The knot will be very useful to tie ligatures, vessels or stumps, in deep cavities especially in biliary, thoracic, gynaecological , or oncological operations.

The advantages of the knot are that it can be tied at the surface, can be slipped down to the vessel/stump to be ligated, does not slip once tightened, can be further tightened by the half hitch, and can be easily tied with one hand.

THE STEPS OF "JAYANT S. VAIDYA KNOT"



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