Basrah Journal of Surgery

How I Do It

Bas J Surg, September, 8, 2002

APPENDICECTOMY

Safwan A. Taha

Professor, Department of Surgery, University of Basrah College of Medicine and Senior Specialist Surgeon, Saddam Teaching Hospital, Basrah; IRAQ.

Introduction

I remove appendices only when they get acutely inflamed, or have recently been so (i.e. interval appendicectomy). I do not believe that such a clinical entity as "chronic appendicits" really exists. Acute appendicitis, by the way, is not at all a "real emergency"; rather, it is an urgent condition requiring operation as soon as possible.

Preparation

Alimentary tract... Abstain from oral intake for 6 hours, and this is a general anesthetic rule.

Skin… Shave only if hair in the right iliac fossa (RIF) is coarse; shave as a small area as possible and as late as practical.

Preoperative measures:

- Premedication as prescribed by the anesthetist.
- An intravenous infusion will only be required if the patient is dehydrated.
- Analgesics and tranquilizers as required.

Correspondence to:
Prof. Dr. Safwan A. Taha
P.O.Box. 1141 Basrah, IRAQ.

Anesthesia

Most anesthetists and surgeons, including myself, want to give a general anesthetic, though some would recommend spinal anesthesia.

Positions

- Patient is supine.
- Assistant is welcome but not esse-ntial, the scrub nurse can assist.

Instruments and other prerequisites

- 1 sponge holder.
- 2 Babcock clamps.
- 4 towel clips.
- 1 knife handle and blade.
- 1 heavy non-toothed dissecting forceps.
- 2 straight artery forceps (17 cm).
- 6 curved artery forceps (12 cm).
- 4 curved artery forceps (12 cm).
- 1 dissecting scissors.
- 1 straight scissors (for stitches and ligatures).
- 2 small Langenbeck, or similar, retractors.

- 1 needle holder.
- sutures:

- one 0 silk (non-absorbable) suture.
- one 2/0 chromic catgut (absor-bable) suture.
- one 3/0 or Vicryl or Dexon (absor-bable) suture.

Operation

Incision

I usually perform a Lanz incision, a 4-5 cm skin crease wound just below, and medial to, the right anterior superior iliac spine. In the majority of patients the incision permits a safe, relaxed procedure. Once access gets inadequate, a quite infrequent occurrence, I extend it laterally according to the situation. Hemostasis is easily secured with electrocautery and I haven't had the need to apply a ligature for this purpose for quite a long time.

Main operation

Commence search for the appendix with the index finger and deliver it through the wound. Unlike many classical operative textbooks, I don't deliver the caecum into the wound; instead, I pull only part of it, including the base of the appendix, into the operative field. By now, the diagnosis is generally confirmed. Have the assistant, or for that matter the scrub nurse, hold the appendix with two Babcock clamps, one near the tip and the other near the base. Clamp the mesoappendix with artery forceps and tie it with silk. Free the appendix along its margin with dissecting scissors down to its base which is crushed with a large artery forceps and ligated with silk. Cut the appendix with knife over a piece of gauze; discard the appendix, gauze and knife. I cauterize the stump with electocautery over the non-toothed forceps. Now, instead of applying the classical "purse-string suture", I leave the appendix stump as it is and replace it, along with the related part of caecum, into the peritoneal cavity after checking hemostasis. I like to call this technique "simple ligation" as opposed to the standard "purse-string invagination" of the appendix stump.

Checks

Once the appendix is found inflamed, it is not essential, in my opinion, to check for other abdominal and/or pelvic pathologies. Yet, it is considered customary to check for Meckel's diverticulum and right ovary.

Closure

I never use drains for acute appendicitis even with perforation and localized soiling, as I believe that the only indication for drainage regarding the appendix is appendiceal abscess. Peritoneum is closed with continuous chromic catgut, muscle approximated with the same suture in a loose "figure-of-eight" fashion and fascia with continuous chromic catgut, too. One chromic catgut suture is sufficient for closure of all the above three layers in almost every patient. I close the skin with subcuticular 3/0 Vicryl or Dexon suture. Light dressing is applied.

If gross sepsis is encountered, or the appendix perforated use "swab on stick" to mop the area clean, do not close the peritoneum and muscle, apply few interrupted chromic Catgut stitches to the fascia and close the skin with well-spaced interrupted stitches of a non-absorbable suture. Do not leave a drain.

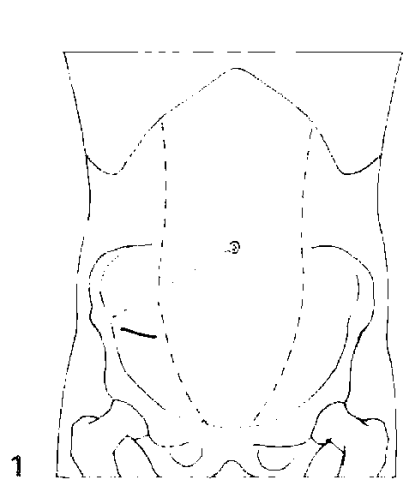
Postoperative management

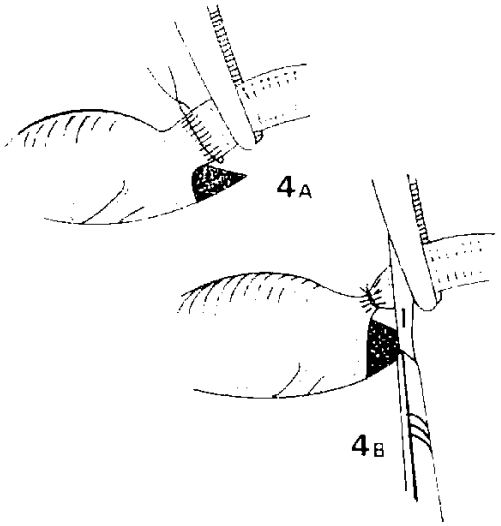
Pain

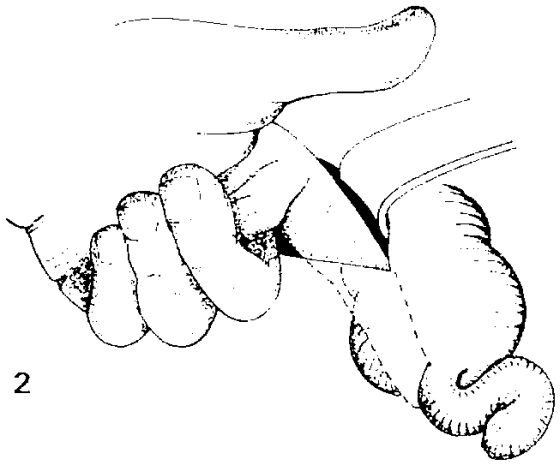
Pethidine 50-100 mg IM is given within the first 24 hours. Any ordinary oral painkiller will suffice after that, if at all needed. The pain of acute appendicitis preoperatively is much more severe

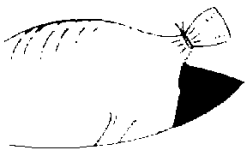
than the postoperative pain following appendicectomy. Analgesic requirements are usually minimal provided the first dose is given just after recovery from the anaesthetic. There is no point what so ever in delaying the first dose until the patient complains of pain.

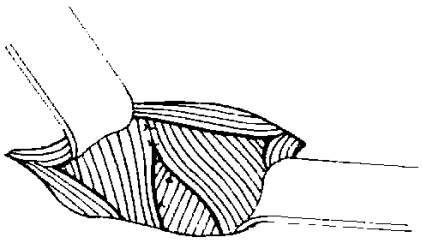
1.Incision. 2.Locating the appendix. 3.Tying the mesentry. 4.Excising the appendix. 5. Reducing the stump (simple ligation). 6.Closure of the wound.

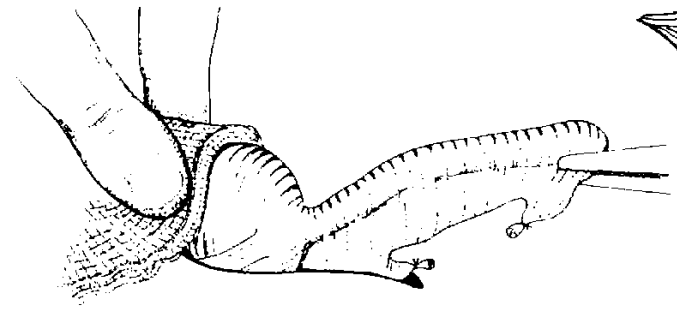












Oral intake

The patient can take any sort of diet, within reason, as early as few hours postoperatively.

Bed rest

Patients should be encouraged to get up as soon as possible.

Antibiotics

I give my patients 3 doses of triple antibiotic therapy (i.e. ampicillin, gentamycin and metronidazole). The first about 8 hours preoperatively, the second just before surgery and the last 8 hours postoperatively. In perforated appendicitis, or with systemic sepsis, the regimen is continued for 5 days. A third generation cephalosporin (like cefotaxime) can be given instead of the triple therapy with the same effect.

On discharge

No dietary restrictions.

Any activity that is comfortable.

- Bathing allowed (but not soaking the wound), but dry the wound carefully.

Follow up

I usually see the patients on the $7^{th} – 8^{th}$ postoperative day and remove the suture in the same visit. The patient can go back to work, after an uncomplicated operation, within 10 – 14 days.

'Appendicectomy or appendectomy?'

A considerable proportion of the world, led by America, currently calls removing the appendix "appendectomy". It is true that languages do change, and that this new term is short and convenient. As a matter of fact, it may well take over from the more correct "appendicectomy". In Britain, and other countries where British cultural influence is still strong, however, appendicectomy still prevails. The issue is that the organ is the appendix, not the 'append', and the normal way to form other words from one ending in -ix, -yx or -ex is to build on the root ending in '-ic-' (or '-yc-'), e.g. calyx, calyceal, calycectomy; cortex, cortical; helix, helical. No one has, so far, started to talk of appenditis, appendular, cortal, helal or calectomy, not even in America (but there is a quite shortened form of calicectomy, 'caliectomy').

Appendectomy, then, is not a real shortening of 'appendicectomy' nor is it a logical one. It remains for the world at large, though, to vote with its tongue for, or against, this rather bizarre form of language.