Appendectomy



Appendectomy is the surgical removal of the appendix when an infection has made it inflamed and swollen. This infection, called appendicitis, is considered an emergency because it can be life threatening if untreated. Occasionally, an inflamed appendix burst after a day of symptoms. The appendix is so close to the large intestine, that it could become clogged with stool and bacteria. Other times mucus produced by the appendix can thicken and cause a blockage. In both cases, once the opening to the appendix is congested, it can become inflamed and swollen causing appendicitis. So it's very important to have it removed as soon as possible.

Appendicitis can cause sudden pain in the middle of the abdomen, usually concentrated around the umbilical area. The pain often moves to the lower right iliac of the abdomen. At first pain might come and go, and then it becomes persistent and sharp. Appendicitis may also cause; loss of appetite, fever, nausea, vomiting, diarrhea, and frequent painful urination. The appendix is located in the abdomen. The appendix is a small organ connected to the cecum in the large intestine. The appendix is a worm like blind tube, 0. 8 cm wide and averaging 8. 5 to 22. 5 cm in length. The appendix derives blood supply from the mesoappendix. One end of the appendix is closed and the other opens into the large intestine, the organ that absorbs water from waste (stool) and moves it out of the of the body through the anus.

Equipment/ Supplies: Equipment used during an appendectomy includes: Suction apparatus, headlamp available, and the electrosurgical unit with dispersive electrodes. (Frey, 2008 pg. 435) Supplies needed during procedure include: Prep set, basic pack, basin set, blades (3) # 10, needle

magnet or counter, antiembolitic hose if requested, ice pack if patient has an elevated temperature, Culture tubes (aerobic and anaerobic), electrosurgical pencil. Penrose drain, irrigation solution, gloves, sutures according to surgeon's preference, laparotomy drapes, and dressing material according to surgeon's preference.

Position: The patient is placed in a supine position; arms may be extended on a padded arm board at less than 90 degree angle to the body. A pad may be placed under the sacrum or under the knees to avoid back strain.

Instrument Set: For an appendectomy a minor instrument set is used. This include: Yankauer suction tip, #3 knife handle, Mayo scissors straight, Mayo scissors curved, 7" Metzenbaum, Adson with teeth forceps, Mosquito curved forceps, Crile forceps 5 ½ Curved, Backhaus towel clamps, Foerster Sponger forceps, Mayo Hegar needle holder 6", U. S Army/Navy retractor, Allis tissue forceps 6", Babcock tissue forceps 6 ¼ , Probe with eye 5 ½, Senn rake retractor, Volkman retractor, Frazier Ferguson suction tip, Schnidts hemostatic forceps. (Frey, 2008 pg. 408)

Back Table: The back table is set up with a basin and an appendectomy minor set with all accountable supplies. Examples of accountable supplies include sponge sticks, kittners/boots, Penrose, vessel loops, sutures, knifes blades, hypos, bovie tips, scratcher ect,. An appendectomy minor tray is place on the center of the table leaving enough space for any additional supplies or items that may be needed during the procedure.

Mayo Stand: The mayo stand is draped with a mayo draped and a towel is placed on top of the mayo. A roll towel is placed on the mayo for the following instrumentation: #3 knives handle with a #10 knife blade, 4-Kellys https://assignbuster.com/appendectomy/

Curved, 4-Peans, 2-Kockers, 2- Allis, 2-Tonsils, Metzabaum scissors, Mayo Tissue & Mayo Suture scissors, 2-Adson with teeth forceps, 2-Debakey forceps, and 2-Goelet retractors.

Medication: Irrigation solution 0. 9 % sodium chloride is used for irrigation.

Lidocane 1% with Epinephrine before incision used as a vas-constriction.

Marcaine . 5% or . 25% with Epinephrine used after closure.

Sutures: During appendectomy a 3-0 polyglactin suture is used to tie the arterial supply to the appendix. Two heavy absorbable sutures such as 0 chromic gut is used to doubly ligate appendix. The peritoneum with the transversalis fascia in running closure with 2-0 absorbable sutures. Transverse abdominis and internal oblique may be approximated with two or three interrupted 2-0 absorbable sutures. External oblique approximated with a 2-0 absorbable or polypropylene sutures. Subcutaneous tissues may be closed with interrupted 3-0 or 4-0 absorbable sutures. Skin is closed with a subcuticular 4-0 suture or skin staples.

Complications: As with any surgical procedure, complications may occur, some possible complications include; Wound infection, Peritonitis-an inflammation of the abdomen that can occur if the appendix ruptures during surgery., Bowel obstruction.

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Appendectomy is the surgical removal of the appendix. The appendix is a worm-shape hollow pouch attached to the cecum, the beginning of the large intestine. Appendectomies are performed to treat appendicitis, an inflamed and infected appendix. Before the incision, the surgeon would carefully

perform a fast physical examination of the abdomen to detect any mass and determine the site of incision.

An open appendectomy requires a transverse incision on the right lower quadrant. The incision is called a McBurney, this type of incisions are rarely performed because of the tendency for dehiscene and herniation. The abdominal wall fascia and the underlying muscular layers are sharply split in the direction of their fibers to gain access to the peritoneum. If necessary, the incision may be extended medially, with the surgeon dissecting some fibers of the oblique muscle and retracting the lateral part of the rectus abdominis. The peritoneum is opened transversely and entered.

Retractors are gently placed into the peritoneum. The cecum is identified and medially retracted. It is then exteriorized, using a moist gauze sponge or Babcock clamp, and the taeniae coli are followed to their convergence. The convergence of the taeniae coli is detected at the base of the appendix, beneath the Bauhin valve, and the appendix is then viewed. If the appendix is hidden, it can be detected medially by retracting the cecum and laterally by extending the peritoneal incision.

After exteriorization of the appendix, the mesoappendix is held between clamps, divided, and ligated. The appendix is clamped proximally about 5 mm above the cecum to avoid contamination of the peritoneal cavity, and the cut is made above the clamp by a scalpel. Fecaliths within the lumen of the appendix may be detected. The appendix must be ligated to prevent bleeding and leakage from the lumen. The residual mucosa of the appendix is gently cauterized to avoid a future mucocele. The appendix may be inverted into the cecum with the use of a purse-string suture. The cecum is

placed back into the abdomen, and the abdomen is irrigated. When evidence of free perforation exists, peritoneal lavage with several liters of warm saline is recommended. After the lavage, the irrigation fluid must be completely aspirated to avoid the possibility of spreading infection to other areas of the peritoneal cavity.

Wound closure begins with closing of the peritoneum with a running suture. Then, the fibers of the muscular and fascial layers are reapproximated and closed with a continuous or interrupted absorbable suture. Lastly, the skin is closed with subcutaneous sutures or staples. In some cases of a perforated appendicitis, some surgeons leave the wound open, allowing for secondary closure or a delayed primary closure until the fourth or fifth day after operation.

Most patients feel better immediately after an operation for appendicitis. Many patients are discharged from the hospital within 24 hours after the appendectomy. Others may require a longer stay, from three to five days. Almost all patients are back to their normal activities within three weeks.