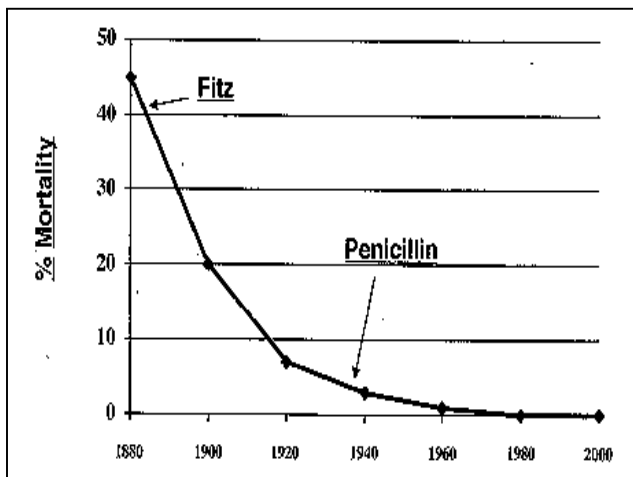


## APPENDICITIS

### History

- 1800 – terms typhlitis and paratyphlitis used for RLQ inflammation started to appear
- 1827 – Meiler described appendicitis on autopsy and proposed correct pathophysiology, but was opposed by Dupuytren
- 1880 - Matterstock in Germany and With in Norway published papers that clearly point to the appendix as a significant cause of iliac fossa inflammation.
- 1886 - Reginald Fitz of Boston coined the term *appendicitis* and recommended early surgical treatment of the disease
- 1889 - Chester McBurney described the migratory pain as well as RLQ point tenderness
  - McBurney described muscle splitting incision
- 1905 – Murphy – described the appropriate sequence of symptoms
- 1940s – Penicillins availability – mortality less than 2%



- Incidence – max late teens and 20s, M>F slightly, infrequent in extreme ages
- Pathophysiology: luminal obstruction (lymph/fecalith/other) - ↑intraluminal pressure/overgrowth/necrosis→ perforation→abscess/peritonitis
- Bacteriology is highly predictable – colonic flora. If there is no perforation – less than 50% positive peritoneal cultures, with perforation – 85% positive. Usefulness of initial cultures is very questionable.
- Diagnosis – primarily is clinical, depends on stage of the disease and localization of the appendix, classical < 50%.
- Imaging: CT (90% sensitivity, 80-90% positive predictive value), true sensitivity is unknown, depends on inclusion criteria, ↑with the stage
- U/S – experienced radiologist needed, depends on institution policy
- Abdominal radiographs – usually non-specific, barium enema – now not used routinely
- Nuclear imaging – true value is unknown
- Laboratory – mild leucocytosis, left shift; U/A – mild pyuria
- Differential – depends on age, sex, presentation: AGE, Diverticulitis, Mesenteric lymphadenitis, Meckel's diverticulitis, intussusception, Crohn's disease, perforated

peptic ulcer, perforated cecal/sigmoid Ca, UTI, Renal colic, GYN disease, acute scrotum, torsion of appendix epiploica, SBP, HSP, Yersiniosis.

- Treatment – depends on presentation/stage of the disease, see suggested protocol
- Appendectomy(Lap/open) – immediately, unless there is periappendicular phlegmon or abscess are present (IV Abx course, drainage of abscess(CT-guided), interval appendectomy)
- Special circumstances: infants, elderly patients, pregnant.
- Laparoscopy – benefit for female, obese patients or when diagnosis is unclear.
- Perforated Appendicitis – course of post-op Abx for 7-10 days and norm WBC and T° norm
- Postoperative Complications
  - Infection – most common complication(wound <5%/abd.cavity<1% for non-perforated appendicitis)
  - Wound – usually safe (cost-effective) to close even for complicated disease
  - ? Increased rate of post-op abscess formation after laparoscopic appendectomy
  - Other post-op complications: bowel obstruction, infertility, miscellaneous (UTI, pneumonia, fecal fistula)

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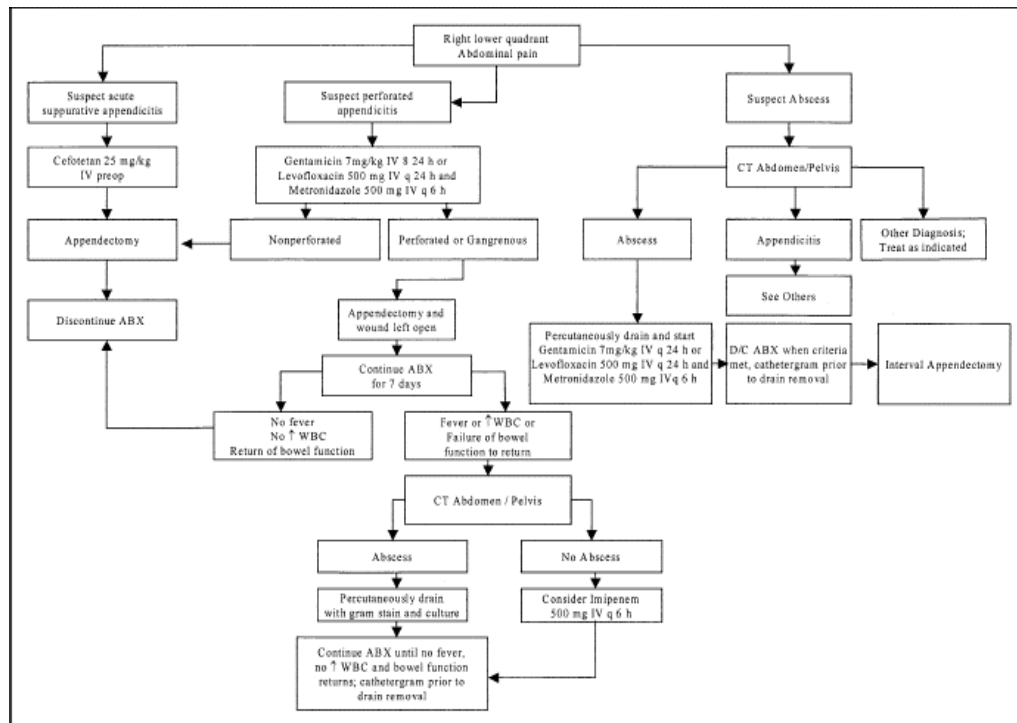


Fig. 1. Standardized protocol for appendicitis. ABX = antibiotics; WBC = white blood cell; D/C = discontinue.