

Investigations:

Mostly one has to rely on clinical findings

TLC ↑ → indicator of inflammation

Urine R/E → To R/o UTI

AxR - KUB → * To R/o ureteric calculus (R)

* To see for any appendicolith

* Free gas in cases of Perf (Rare)

USG :- Only 30% cases can be picked up that too by good sonologist.

Treatment

Appendectomy only

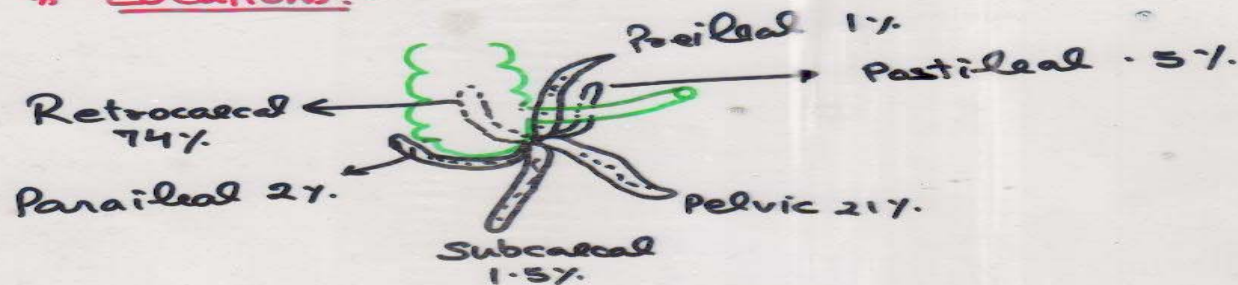
Incisions

1. Grid Iron - At Mc Burney's point. Muscle splitting
2. @ Lower paramedian
3. Rutherford Morrison's - Oblique muscle cutting incision

Technique :-

Appendix

- * 7.5 - 10 cm Long on Caecum
- * Has Mesappendix having appendicular A.
- * Surface Anatomy - Mcburney's Point (Lat $\frac{1}{3}$ ← medial $\frac{2}{3}$)
- * Locations:-



Acute Appendicitis

Common cause of Acute Abdomen

Aetiology :- Not very clear.

- Race & diet :-
- * Highly civilized population of Europe
 - * Meat consumption
 - * Indian Setup - no particular trend

Obstruction of Lumen

- Faecolith
- Foreign body
- Worm
- Distal obstruction of colon

Bacterial Population

- E. coli - 85%
- Enterococci - 30%
- No Hemolytic streptococci
- Anaerobic streptococci
- Ch. welchii
- Bacteroids

Pathology:- Infection of Peritoneal cavity

1. Transmission of Bacteria through inflamed appendicular wall
2. Perforation

Greater omentum in order to contain damage tries to cover the inflamed organ.

Two Types

a) Non-Obstructive :- Starts in mucus membrane

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graph LR; A[Non-Obstructive] --> B[Resolution]; A --> C[Ulceration]; A --> D[Suppuration]; A --> E[Fibrosis (Tip)]; A --> F[Gangrene];
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b) Obstructive :-

Mostly results in gangrene

Clinical Presentation

Age Rare - before 2 yrs of age

Common - Early childhood & adolescence

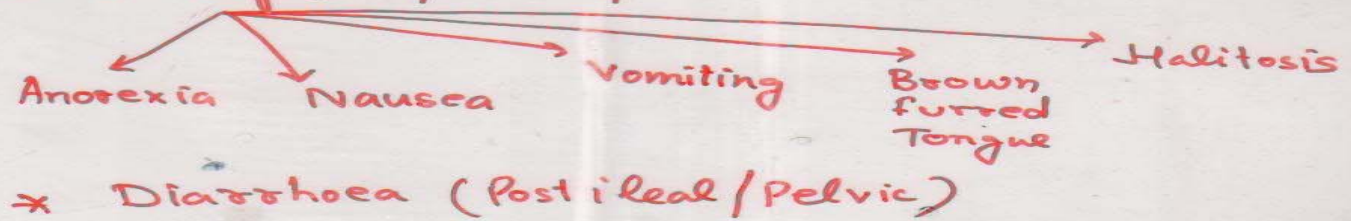
Maximum - 20 - 30 yrs of age

No age is Exempt

Non Obstructive Type Special Features

a) Abd. Pain & Shifts : Pain around umbilicus/Epi/Gem
(visceral pain due to distension)
localizing to RIF (Local irritation of Peritoneum)
Somatic / Localized / constant

2. GI Upset :- * Reflex Pylorospasm



3. Tenderness at Mc Burney's Point

General Features

- Low Grade fever ($37.2 - 37.7^{\circ}\text{C}$)
- Tachycardia 80-90/min
- High grade fever $\bar{c}$ corresponding $\uparrow$ in pulse rate

TLC $> 10,000/\text{mm}^3$ in about 90% cases

In Obstructive appendicitis all above features may be present except that they appear quickly

Special Features

Retrocaecal :- * Silent Appendix
* GRT oftenly absent
* Psoas Spasm

Pelvic :- * Absent GRT
* Tenderness on PR
* Diarrhoea

- * Post Ileal :-
 - * Pain may not shift
 - * Diarrhoea
 - * marked retching
 - * Tenderness

- * Mal descended :- subhepatic - confusion & Ac. cholecystitis

Age & Appendicitis

Infants :- More chances of perforation
High mortality

Children :- Vomiting - marked feature
Aversion to food

Aged :- * Symptoms / signs - Less marked
due to lax abd wall
* Gangrene / perforation frequent

Diagnosis in Pregnancy Difficult

Premature Labour / Abortion	<	Non Perforated	30%
		Perforated	50%

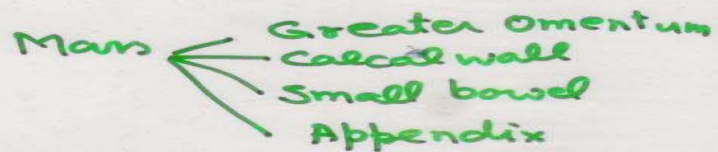
Differential Diagnosis Site specific

- Enterocolitis
- Non specific mesenteric lymphadenitis
- Int. Obstruction
- Regional Ileitis
- Ca Caecum

Appendicular Mass

(Periappendicular Phlegmon)

Usually appears on 3rd day of attack



4-5th Day — Circumscribed (Should be marked)

5th-10th Day Course → Abscess
or
↑ in size or ↓ in size

D/d Ca Calcium
Crohn's Disease
Ovarian Ca
Ileocaecal TB

Management

Conservative (Ochsner - Sherris)

→ Localized

→ Surgery is difficult/dangerous

Strict Monitoring

Charting of → Pulse every hour
Temp. every 4 hrs
Vomitus — NG Tube

Diet :- water 30ml hourly
Desire for food → indication of improvement.

- Meckel's Diverticulitis
- Salpingitis
- Ectopic Pregnancy
- Ruptured ovarian Follicle
- Twisted ovarian Cyst
- (R) ureteric colic
- (R) Ac Pyelonephritis

General

Tonsillitis

Pleurisy

Perforated ulcer

Ac. Cholecystitis

IV fluids & Electrolyte check & correction

Drops → No sedatives

Antibiotics → Pen + Metro + Aminoglycoside

Bowel Care

Glycerine suppository on 4-5th Day

No Purgatives.

When to Stop Treatment

1. Rising Pulse
2. Rptd. Vomiting
3. Spreading Abd. pain
4. ↑ in size of Lump or Abscess

Contraindications

- Exact diagnosis of Ac. Appendicitis - doubtful
- Only Appendix is inflamed (No Mass)
- < 10 yrs age or > 60 yrs.

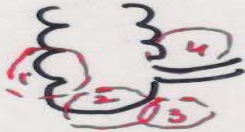
Outcome 90% Resolution



Interval Appendectomy

Appendicular Abscess → Mass → Abscess

Fever
Tachycardia
↑ TLC (Polymorph)



Site according to Appendix

P - Drainage

↓
Interval appendectomy

Complications :- Ileus
Wound sepsis
Residual abscess

Late :- Int. Obst
Incisional Hernia
Frozen pelvis