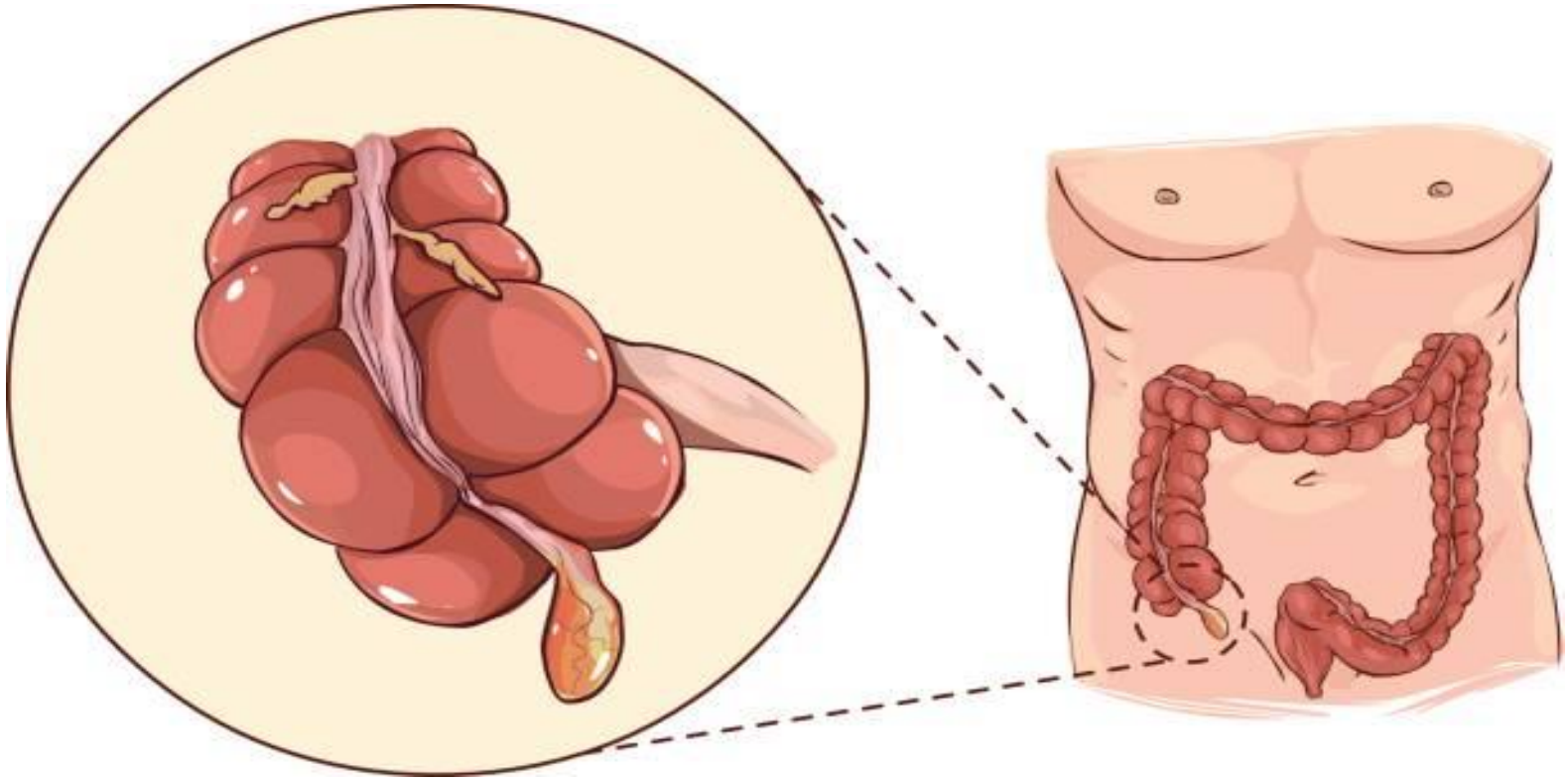
Appendicitis.



Incidence

- One of the more common causes of acute abdominal pain.
- Common in children and early adult life.
- Rare in infants and after the middle age .
- Younger children have a higher rate of perforation.

Sites of appendix

1. Retrocaecal – Silent appendix
2. Pelvic
3. Paracaecal
4. Subcaecal
5. Preileal
6. Postileal

Pathophysiology

- Once obstruction of the lumen occurs , continuos mucus secretion and inflammatory exudation occur.
- It increases the intraluminal pressure and obstruct the lymphatic drainage.
- Oedema and mucosal ulceration develop with bacterial translocation to the submucosa.

Pathophysiology

- Once odema and ulceration occurs, resolution can occur at this point.

- Either spontaneously or in response to antibiotics.

- If the condition further Progress , further distension causes venous obstruction and ischaemia of the wall.

Pathophysiology

- With the ischaemia , bacterial invasion occurs through the muscularispropia and submucosa , producing acute appendicitis.

- Finally ischaemic necrosis of the appendix wall produces gangrenous appendicitis.

Aetiology

- It occurs due to obstruction of the appendiceal lumen.

Common causes ; 1. Lymphoid hyperplasia.

Crohn’s disease, Gastroenteritis , Amoebiasis, Respiratory infections, Measles , Mononucleosis.

Contd.

2.Faecaliths.

More common in elderly.

3Parasites.

4. Foreign bodies.

5. Neoplasms.

6. Familial predisposition is there rarely.

Clinical features

1. Central abdominal pain radiating to RIF.

(Pointing sign)

2. Anorexia
3. Nausea and vomiting
4. Slight pyrexia.

Contd.

5. RIF tenderness.
6. Rebound tenderness.
7. Rovsing’s sign.
8. Psoas sign.- Hip will be kept in flexed position.
9. Obturator sign.

Alvarado Score

Baily and love 27th edition.

TABLE 72.2 The Alvarado (MANTRELS) score.

	Score
Symptoms **M**igratory RIF pain	1
Anorexia	1
Nausea and vomiting	1
Signs	
Tenderness (RIF)	2
Rebound tenderness	1
Elevated temperature	1
Laboratory	
Leucocytosis	2
Shift to left	1
Total	10

RIF, right iliac fossa; MANTRELS, Migration of pain, Anorexia, Nausea or vomiting, Tenderness, Rebound pain, Elevation of temperature, Leucocytosis, Shift to left (segmented neutrophils).

Scoring

- Diagnosis of acute appendicitis is essentially clinical.
- A number of clinical and laboratory based scoring system are there to assist the diagnosis.
- Most widely used one is Alverado scoring system.

Scoring

- A score of seven or more is strongly predictive of acute appendicitis.

- In patients with 5-6 score, need abdominal USS or CECT for further.

Clinical features –Contd.

Can vary according to the position of the appendix.

Ex – 1.Retrocaecal appendix. (Silent, loin tenderness)

2.Pelvic appendix. (Diarrhoea, increased urinary frequency)

Investigations

1. FBC
2. UFR
3. CRP
4. USS
5. Contrast CT.
6. Urinary beta HCG in female of childbearing age.

Treatment

- While surgery remains the standard teaching, there is an emerging body of literature to support a conservative management in uncomplicated appendicitis.
- Treatment is bowel rest and Intravenous antibiotics.
- Often with Metronidazole and 3rd generation cephalosporins.

Treatment

- However approximately one – quarter of patients initially treated conservatively will require surgery within 1 year for recurrent appendicitis.

- As conservative management of appendix mass , patient over the age of 40 should be followed to ensure there is no underlying malignancy.

Treatment

- Perform laporatomy if perforated.
- Incision and drainage if appendicular abscess formed.
- Appendicectomy and IV antibiotics also used.

Appendicular mass

Features to suggest mass becoming an abscess.

1. Tachycardia
2. Spreading abdominal pain.
3. Increased size of the mass.
4. Pyrexia inspite of antibiotics.
5. Continous anorexia.

Treatment

Conservative management if appendicular mass formation.

Then monitor PR, BP, RR, QHT and mass size.