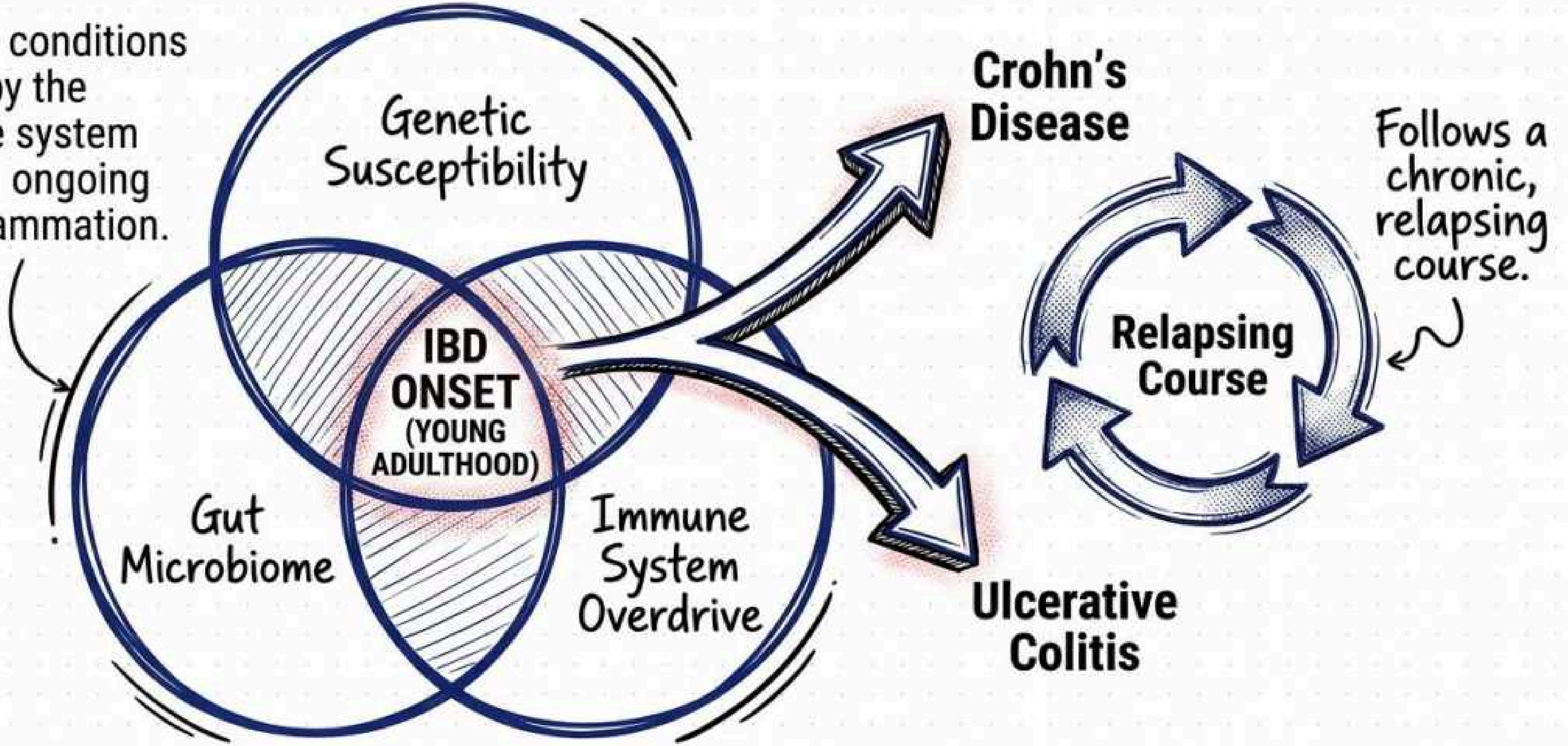
Inflammatory Bowel Disease (IBD)

¶ 4.1

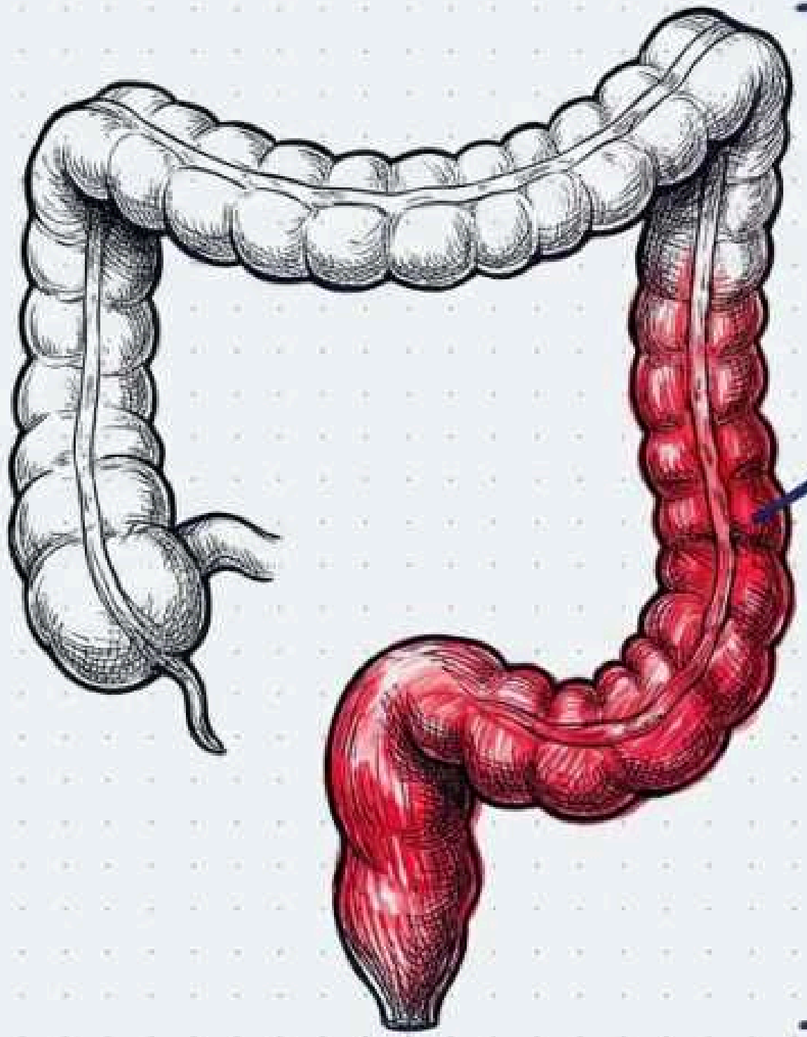
Chronic conditions driven by the immune system causing ongoing gut inflammation.



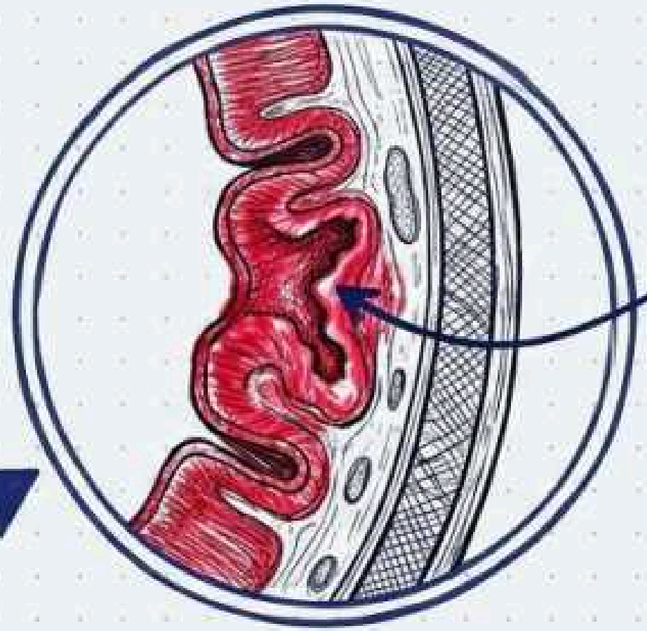
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Ulcerative Colitis (UC) Pathology

¶ 4.2



Confined to Colon & Rectum.
Starts distal (rectum), spreads continuously upward.



Inflammation restricted strictly to inner lining (mucosa).

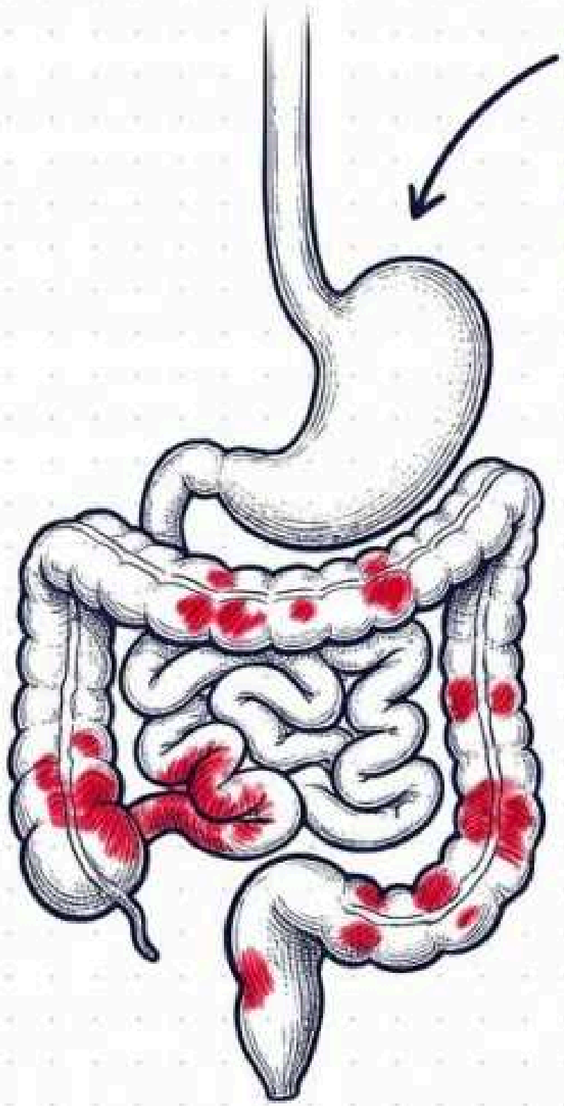
Clinical Presentation

- ☑ - Bloody diarrhoea
- ☑ - Urgency
- ☐ - Abdominal cramps

⚠ Severe flares can be dangerous requiring hospital treatment.

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Crohn's Disease Pathology



Mouth to Anus
(Most common: terminal ileum & colon).
Patchy inflammation with normal areas between.

Stricture
(narrowing causing blockage)

Transmural
(full-thickness) involvement

Fistula
(tunnel connecting bowel to other organs/skin)



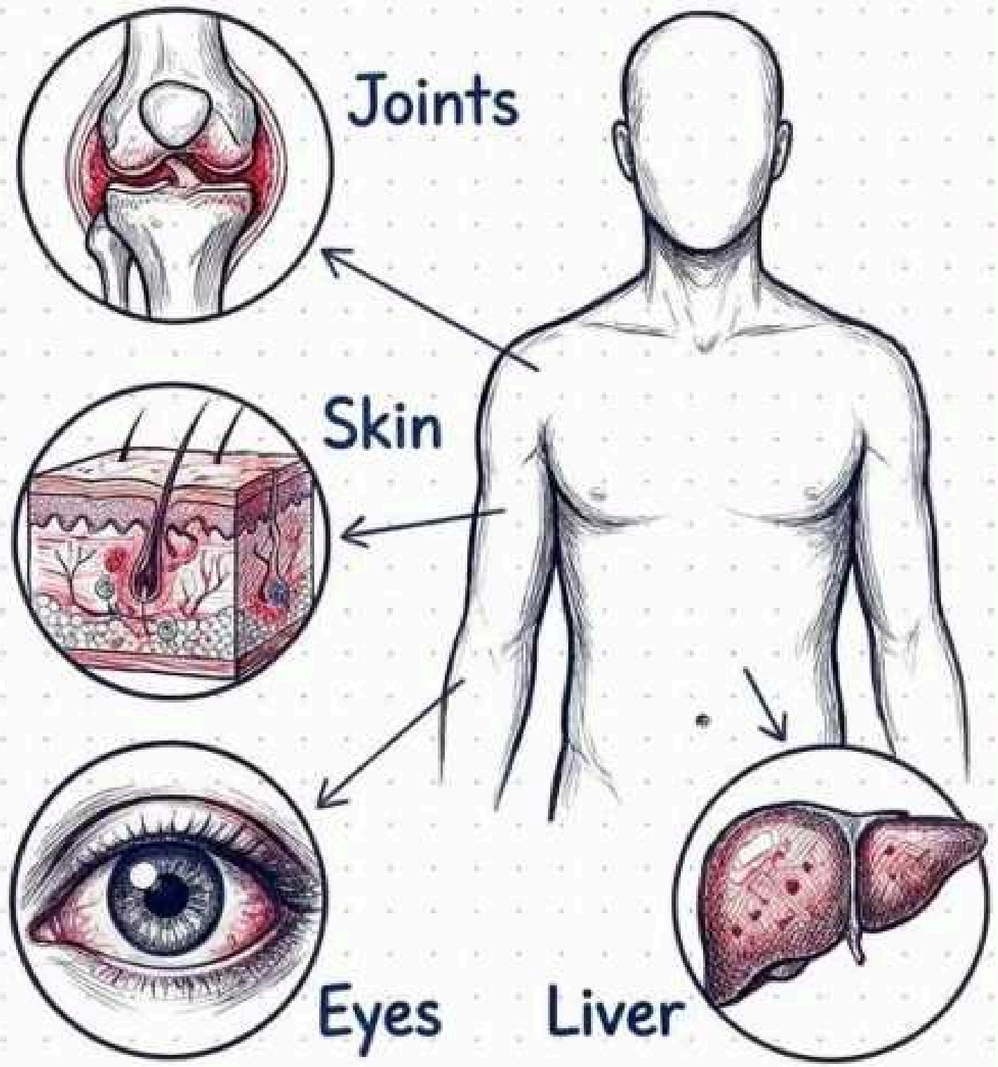
Smoking makes Crohn's disease worse.

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Systemic Manifestations & Diagnosis Toolkit

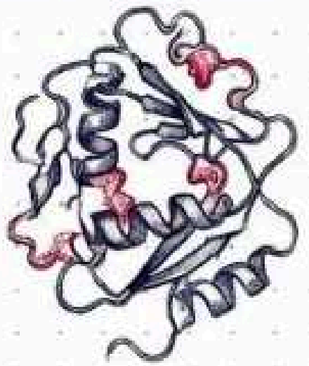
¶ 4.4

Both Crohn's and UC affect the joints, skin, eyes, and liver.

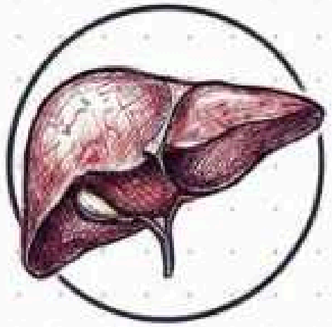




Calprotectin



Protein released by inflamed gut tissue. Crucial for distinguishing IBD from Irritable Bowel Syndrome (IBS).

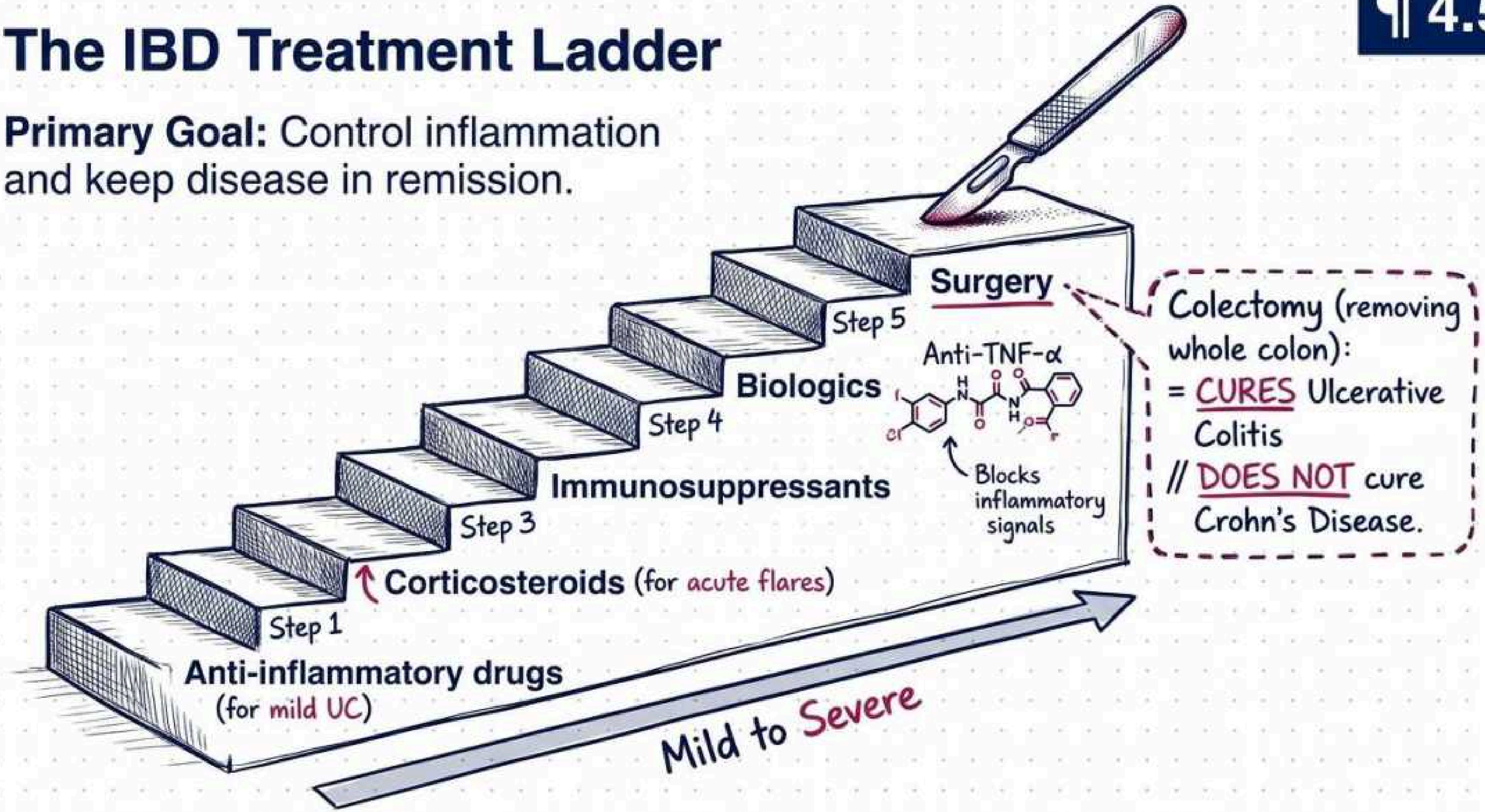


- Symptoms
- Blood & Stool Tests
- Imaging / Colonoscopy + Biopsy

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The IBD Treatment Ladder

Primary Goal: Control inflammation and keep disease in remission.

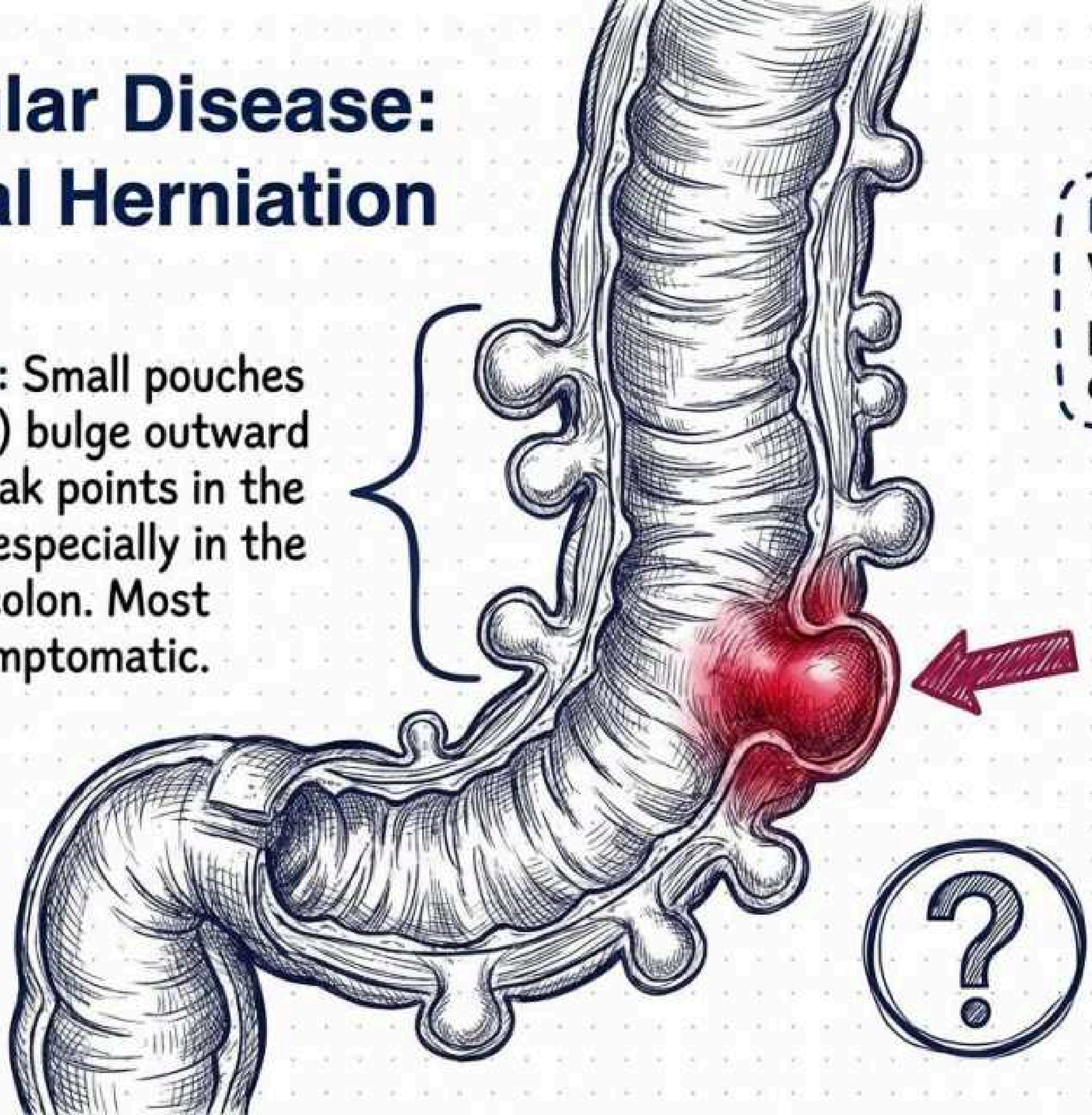


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Diverticular Disease: Structural Herniation

¶ 4.6

Mechanism: Small pouches (diverticula) bulge outward through weak points in the colon wall, especially in the lower left colon. Most remain asymptomatic.



Demographics:
Very common in older people in wealthy countries.

Diverticulitis:
When inflamed, causes left-lower quadrant pain and fever.

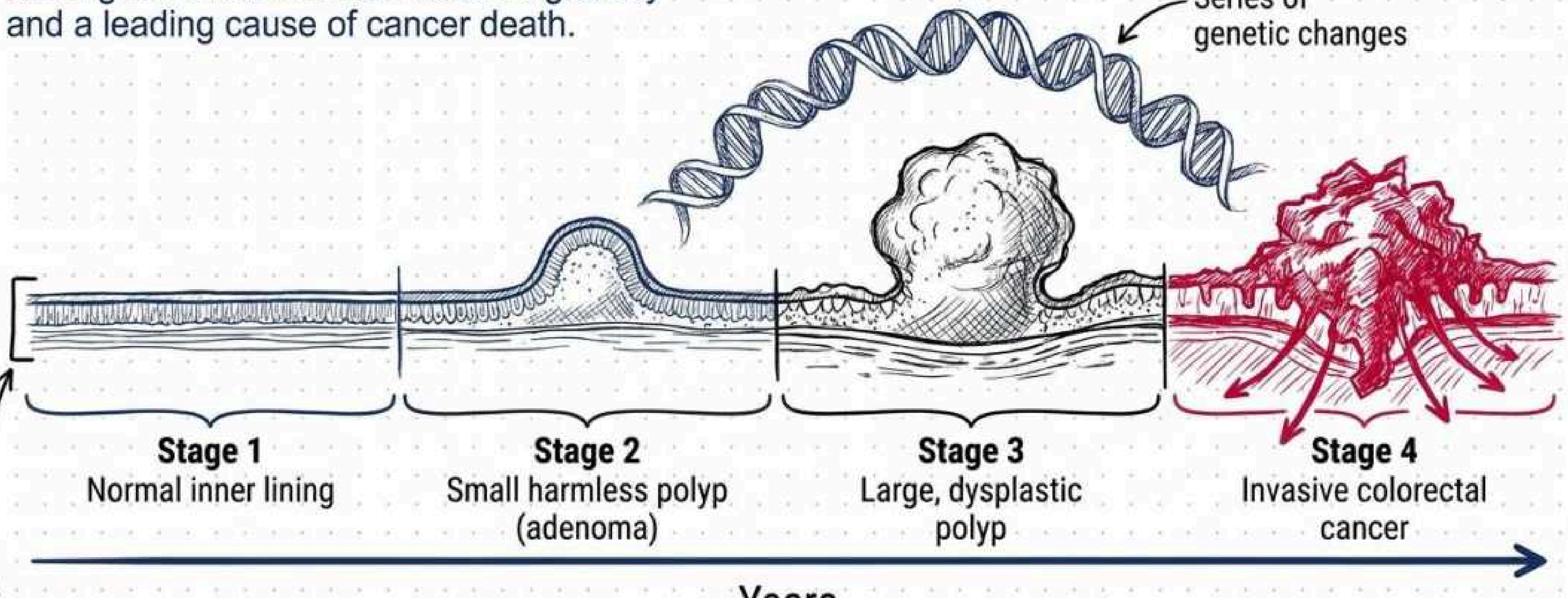
Debate Note:
Low-fibre diets were long blamed; evidence is still debated.

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Colorectal Cancer (CRC) Pathogenesis

¶ 4.7

Among the most common cancers globally and a leading cause of cancer death.



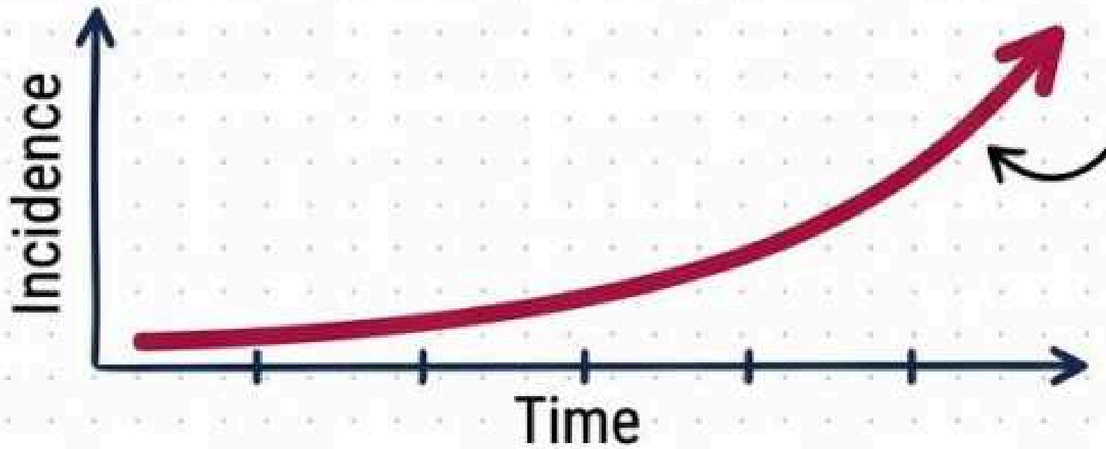
Sequence mapped in the late 1980s. Serves as a master model for how cancers develop (Link to Medicine 503 B).

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CRC Risk Factors Matrix

¶ 4.8

Fixed Factors	Modifiable Factors
• Increasing age • Family history • Inherited conditions (e.g., Lynch syndrome) • Long-standing IBD	• Obesity & Physical inactivity • Smoking • Heavy alcohol use • Diets high in red/processed meat and low in fibre



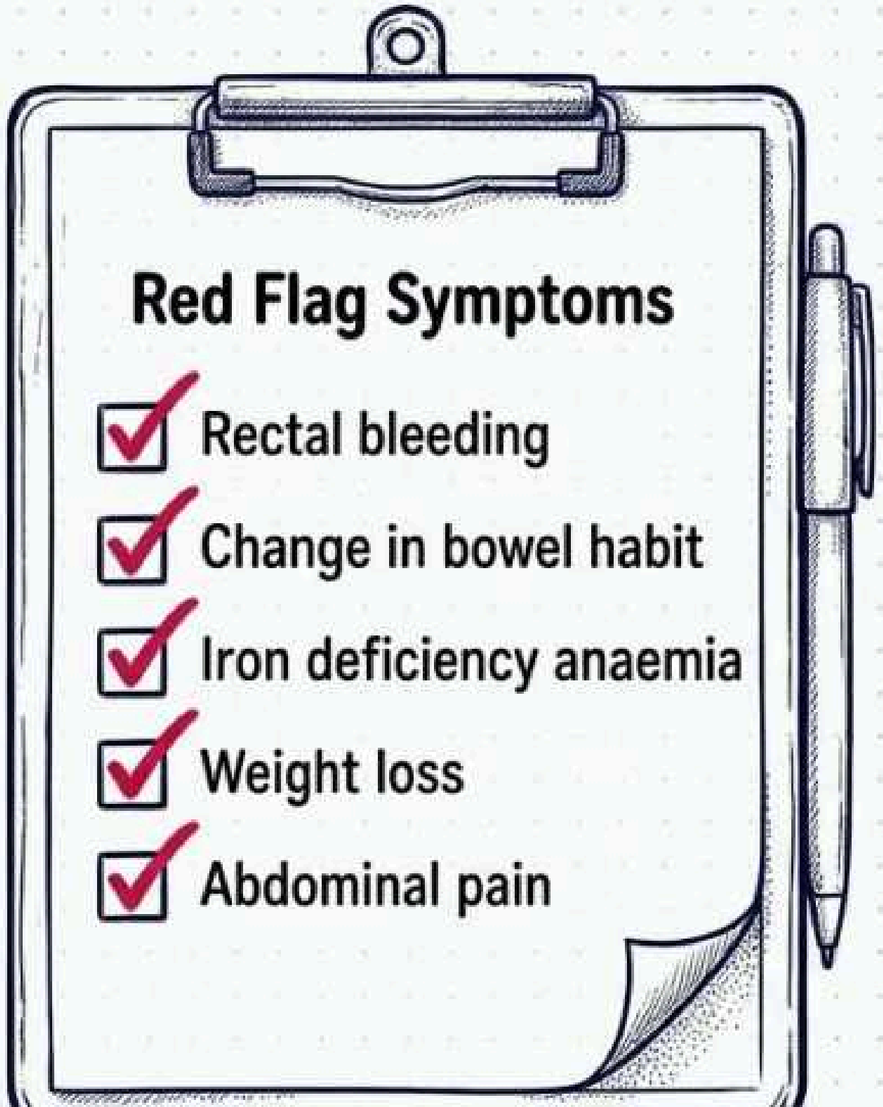
Alarming Trend: Rates in younger adults have been rising in many countries (reasons not yet fully understood).

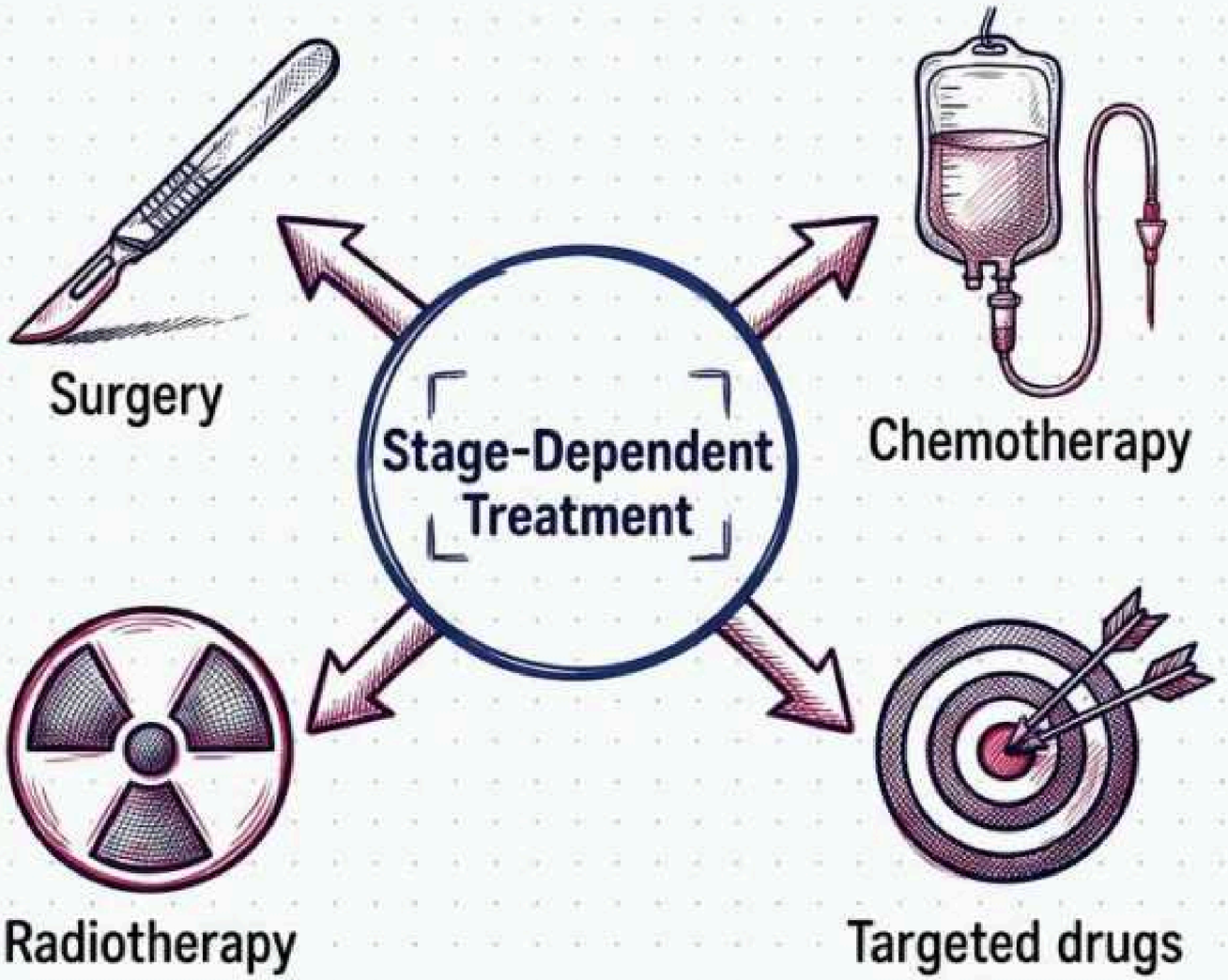
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Clinical Presentation & Stage-Dependent Management

¶ 4.9

Presence of these symptoms must prompt immediate investigation, especially in older adults.



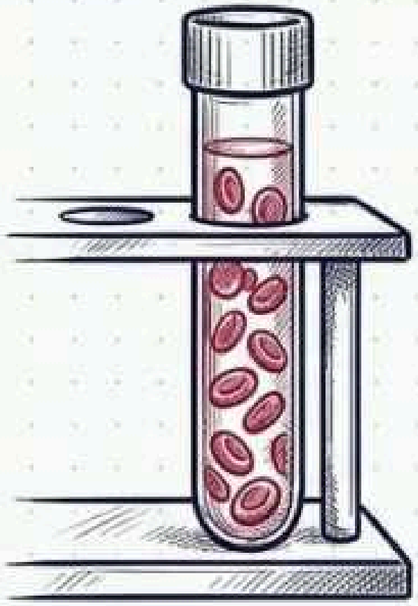


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The Science of CRC Screening (Medicine 515 B Principles)

¶ 4.10

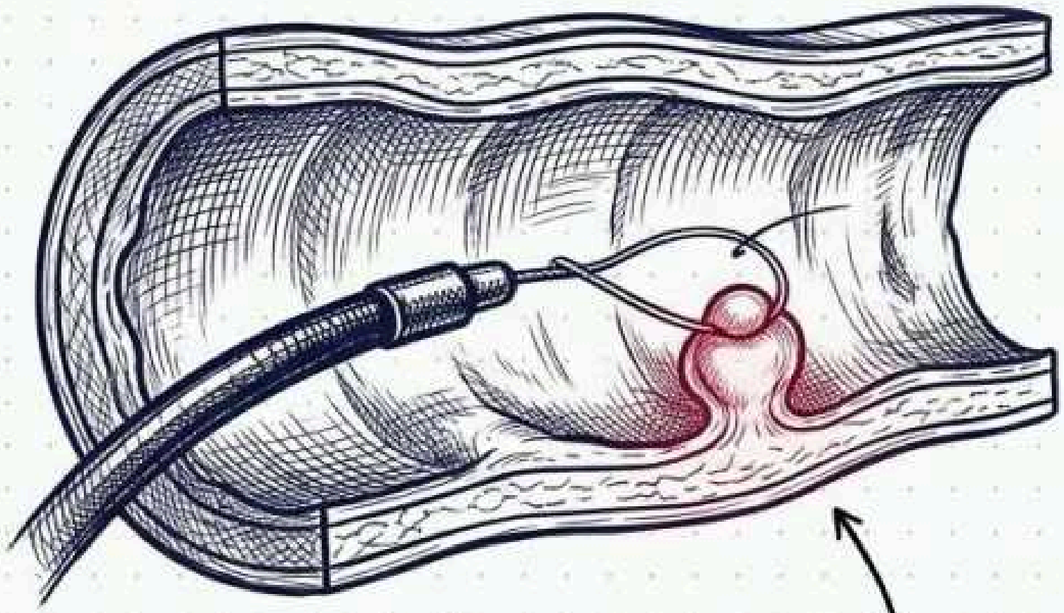
Because CRC develops slowly from visible polyps, it is uniquely suited to screening.



Stool Test

- Detects microscopic, hidden red blood cells in stool.

Stool Test



Colonoscopy

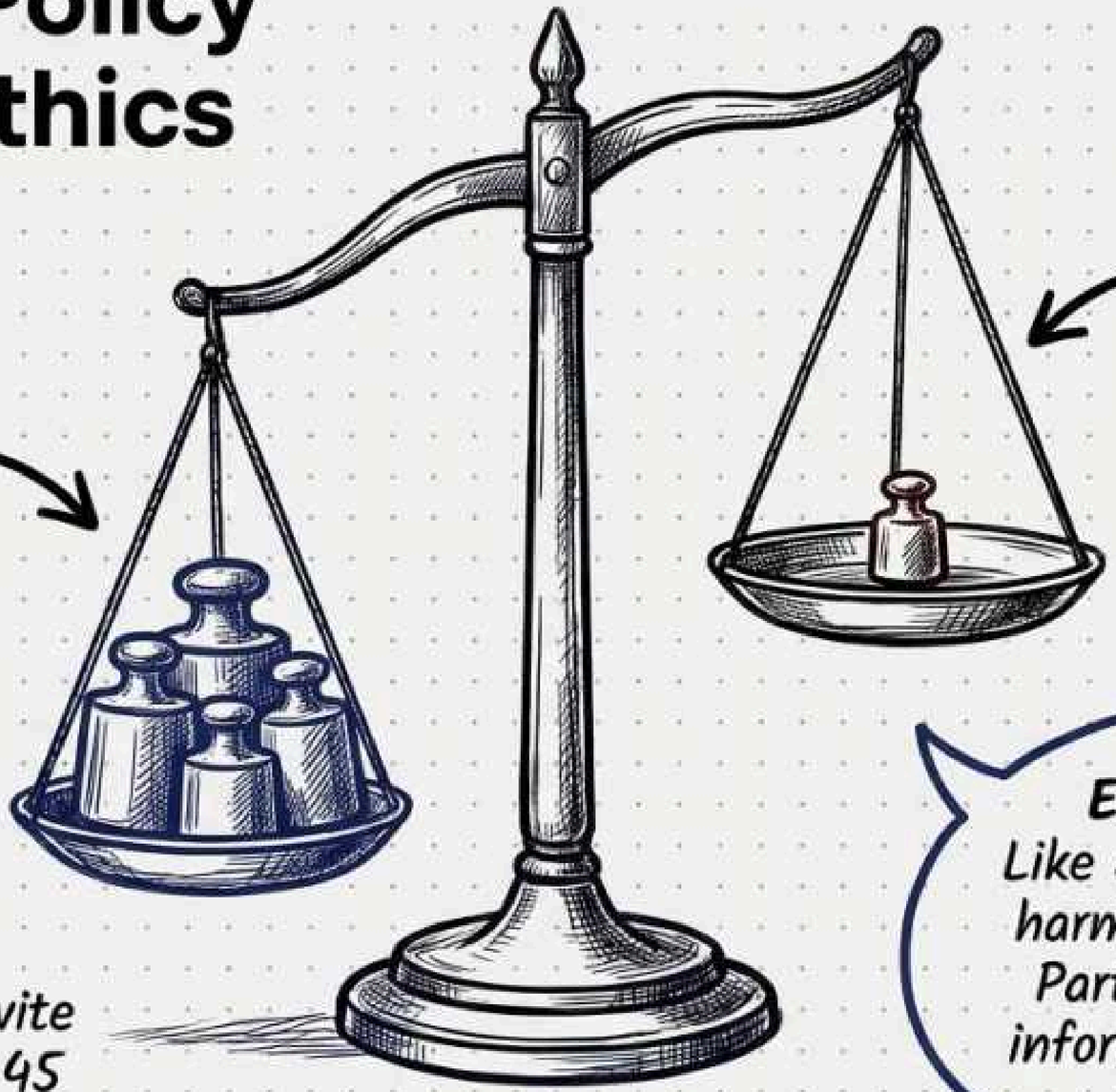
Both methods reduce CRC deaths. Colonoscopy goes further—it removes polyps before they become cancer, preventing the disease altogether.

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Screening Policy & Clinical Ethics

¶ 4.11

Benefits:
Reduced CRC deaths and total cancer prevention.



Harms:
Procedure risks (e.g., colonoscopy complications).

Target Demographics:
Programmes typically invite adults from around age 45 or 50 (varies by country).

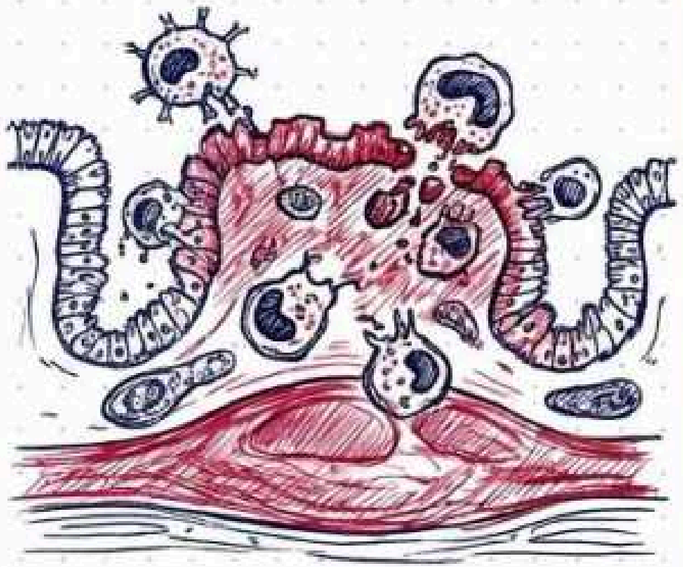
Ethical Imperative:
Like all screening, there are harms as well as benefits. Participation must be an informed choice made with clear information.

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Synthesis: Three Pathologies of the Colon

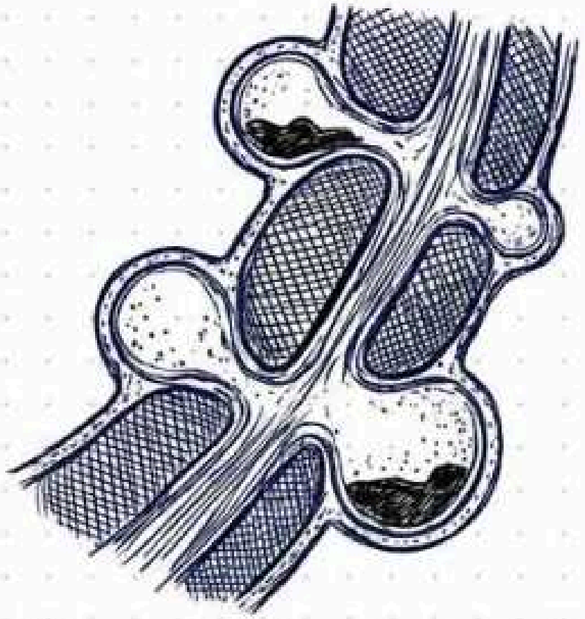
¶ 4.12

Inflammation



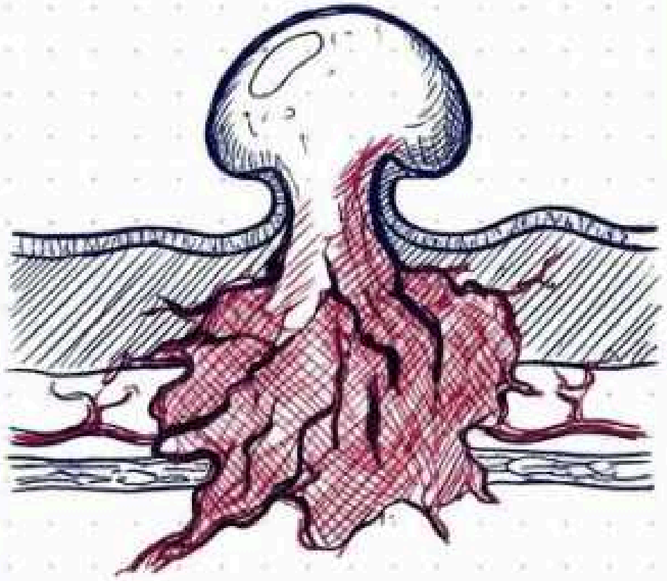
(IBD)

Pouches



(Diverticular Disease)

Polyps



(Colorectal Cancer)

Colorectal cancer stands as the master model of how screening can proactively prevent disease.

Next up:
The Liver.

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