Ischaemic Colitis - Full Clinical Guideline

Reference no.:CG-GASTRO/2023/017

1. Aim and Purpose

This clinical guideline is applicable to adult patients with Ischaemic Colitis admitted to UHDB.

2. Introduction

Ischaemic colitis refers to an acute, transient compromise in blood flow, below that required for the metabolic needs of the colon. This leads to mucosal ulceration, inflammation, and haemorrhage. The duration and severity of hypoperfusion determines whether the colonic injury is predominantly ischaemic, or as a consequence of reperfusion. Ischaemic Colitis is a different disorder to mesenteric ischaemia. The incidence of ischaemic colitis is 22.9/100K population. The usual clinical scenario is of an elderly patient, or a patient with known vascular disease with generally self limiting course of regional colitis (watershed area of splenic flexure) that requires non operative support and monitoring.

3. Signs and Symptoms of Ischaemic Colitis:

Acute presenting symptoms are, colicky pain often followed by profuse bleeding and on occasion diarrhoea. Symptoms manifest in a matter of hours and continue to worsen with systemic instability.

Examination typically reveals a soft abdomen with tenderness and voluntary guarding over the affected segment of colon. The presence of peritonitis suggests full thickness ischaemia, perforation, or alternative diagnosis.

Ischaemic colitis may result in systemic inflammatory response syndrome (SIRS) with associated observations of tachycardia, hypotension, tachypnoea, and occasionally raised temperature without an infective focus. Patients can present in a state of shock, leading on to multi-organ failure.

Clinically it can be difficult to differentiate between patients with possible infective, inflammatory, or ischaemic colitis and early recognition of patients with symptoms of colitis who are deteriorating will need to be referred to gastroenterologist or surgeons.

4. Causes of Ischaemic Colitis:

1. Physiological

- *Systemic*—Heart failure, systemic inflammatory response syndrome (SIRS), atherosclerosis, hypotension due to other causes e.g. severe dehydration often in combination with atherosclerosis at the mesenteric vessels origin

- *Embolic*—Atrial fibrillation (rarely

- *Thrombotic*—Concurrent malignancy and haematological disorders.

2. Iatrogenic

Pharmacological—Chemotherapy, sex hormones, interferon therapy, pseudoephedrine, cardiac glycosides, diuretics, statins, non-steroidal anti-inflammatory drugs (NSAIDS), immunosuppressive drugs, vasopressors.

Surgical—Abdominal aortic aneurysm repair

Endoscopic—Colonoscopy and bowel preparation media for colonoscopy

5. Investigations

Bloods - Clotting studies, FBC, U&E, CRP, LFT, serum lactate

Imaging – CXR, AXR, CT abdomen with contrast

Colonoscopy or flexible sigmoidoscopy - within 48 hours to visualise mucosa, only if there is doubt about the diagnosis. Colonoscopy is a safe procedure in ischaemic colitis, and there is no evidence it is unsafe when performed by experienced practitioner. Flexible sigmoidoscopy may be better tolerated by older frail patients. Transient non-gangrenous features of ischaemic colitis observed at colonoscopy include:

- Petechial haemorrhages
- Oedematous and fragile mucosa
- Segmental erythema
- Scattered erosion,
- Longitudinal ulcerations(colon single stripe sign)
- A sharply defined segment of involvement

6. Treatment

Admission – as patients with ischaemic colitis usually present with abdominal pain and PR bleeding, initial admission will usually be under the general surgical team

Initial resuscitation

General resuscitation principles to include:

- Intravenous fluid resuscitation
- Fluid balance monitoring with bladder catheterisation
- Assessment of acid-base status with arterial blood gas sampling
- Blood glucose control and monitoring in diabetic patients
- Clear fluids by mouth only until further review and a decision made about surgery
- Prophylactic anticoagulation (therapeutic anticoagulation is not indicated)
- Consider echocardiogram to look for cardiac emboli
- Antibiotics - only if systemically unwell – seek microbiological advice
- Nutritional support, all patients to be referred to dieticians and may need NG feeding
- For analgesia use PO/IV/rectal paracetamol

Daily Review

- Review of temperature, pulse, respiration, BP
- Abdominal examination
- Stool charts,
- Daily bloods –FBC, U&E, CRP

Surgery

Consider surgical intervention if there is radiological evidence of perforation, generalised peritonitis, or continuing haemorrhage causing instability or repeated transfusion. For patients without these features, decisions whether to operate when conservative management fails are made on an individual basis.

7. Follow up

Uncomplicated ischaemic colitis is usually followed up once after admission by the surgical team, then the patient discharged back to community care. Chronic or recurrent ischaemic colitis occurs in 10% of patients. This can present as another acute episode similar to the index admission. At the site of previous ischaemic colitis stricturing can occur, causing bloating, constipation, and colicky pain as well as chronic ulceration prone to bleeding that may manifest itself only as anaemia.

Ask GP to assess CVS risk, optimise control of hypertension and consider for Statin etc.

References

1. Trotter JM, Hunt L, Peter MB. Ischaemic Colitis. *BMJ* 2016; 355 doi: https://doi.org/10.1136/bmj.i6600 (Published 22 December 2016)

Documentation Controls

Development of Guideline:	Dr Mehreen Rizvi, F2 Gastroenterology Dr Stephen Hearing, Consultant Gastroenterologist
Consultation with:	Mr Speake, Miss Tierney, Consultant Colorectal Surgeons Mr Lingham, Consultant Vascular Surgeon Dr Dor
Approved By:	Gastro Sub-directorate 25/7/23 Medical Division 22/9/2023
Review Date:	September 2026
Key Contact:	Dr Stephen Hearing, Consultant Gastroenterologist