

STANDARD OPERATING PROCEDURE

COLONOSCOPY

1. Purpose

To provide a standardized protocol for safe, effective, and high-quality colonoscopy for diagnosis, surveillance, and therapeutic management of colorectal diseases.

2. Scope

This SOP applies to: General surgeons, endoscopy nurses, anesthesia team

3. Responsibilities

Surgeon/Endoscopist - Patient selection, consent taking, performing procedure, documentation, management of complications

Endoscopy Nurse - Patient preparation, equipment preparation, monitoring vitals, assistance during procedure, scope disinfection, equipment maintenance, image recording

Anesthesia Team - sedation administration, airway monitoring and recovery supervision

4. Indications

Diagnostic indications:

- Lower GI bleeding
- Chronic diarrhea
- Change in bowel habit
- Iron deficiency anemia
- Suspected colorectal cancer
- IBD diagnosis
- Abdominal pain (selected cases)

Screening indications: Colorectal cancer screening (>45 yrs), family history colorectal cancer, polyposis syndromes

5. Contraindications

Absolute: Suspected perforation, peritonitis, fulminant colitis, toxic megacolon, unstable patient

Relative: Acute diverticulitis, severe colitis, coagulopathy, recent MI, poor bowel preparation

6. Pre-Procedure Assessment

History: Indication, comorbidities, drug history (anticoagulants, antiplatelets), allergy, previous surgery, previous colonoscopy

Examination: Vitals, abdominal exam, digital rectal exam

Investigations: CBC, INR, renal function (if elderly) and ECG if high risk

7. Patient Preparation

Consent: Bleeding risk, perforation risk, sedation risk, need for biopsy/polypectomy

Fasting: 6 hours for solids, 2 hours for clear liquids

Bowel Preparation:

Split dose PEG

Diet: Low residue diet 2 days before and clear liquids day before

8. Equipment Preparation

Colonoscope: Light source, camera, suction, insufflation (CO₂ preferred)

Accessories: Biopsy forceps

Emergency: IV fluids, oxygen, suction, adrenaline

9. Procedure Steps

Position: Left lateral position initially

Monitoring: Continuous monitoring: Pulse, BP, oxygen saturation

Sedation (if used): Midazolam, fentanyl, propofol

Steps:

1. Insert colonoscope gently per rectum
2. Advance under direct vision - Identify landmarks: Rectum, sigmoid, descending colon, splenic flexure, transverse colon, hepatic flexure, ascending colon and cecum
3. Withdrawal phase (most important): Careful mucosal inspection, minimum withdrawal time 6 minutes
4. Perform: Biopsy if needed
5. Retroflexion in rectum

10. Documentation

Must include: Patient details, indication, bowel preparation quality, extent reached, findings interventions done, complications, biopsy taken, photo documentation, post procedure plan

11. Post Procedure Care

Observation: 30–60 minutes if sedation used

Monitor: Pulse, BP, pain, bleeding

Diet: Start fluids when awake and normal diet if no complications

12. Complications Management

Bleeding:

Minor: Observation

Significant: Adrenaline injection

Delayed bleeding: Readmission if needed

Perforation:

Signs: Severe pain, tachycardia, peritonitis

Management: CT scan, IV antibiotics, emergency surgery if required

Sedation complications: Oxygen, airway support, reversal drugs (Flumazenil and naloxone)

13. Discharge Criteria

Patient can go home if: Fully conscious, stable vitals, no bleeding, no severe pain, able to tolerate fluids

Return if: Bleeding, severe pain, fever, vomiting

Avoid: Driving 24 hrs if sedation used

14. Follow Up

Depends on findings:

Normal: Repeat screening 10 yrs

Polyp: 3–5 yrs depending histology

Cancer: Refer MDT

IBD: Surveillance protocol

Biopsy: Review report

15. Infection Control

Mandatory scope disinfection:

Steps: Pre cleaning, Leak test, Manual cleaning, High level disinfection, Drying, Storage

16. Required Documentation Forms

- Consent form
- Procedure record
- Nursing monitoring chart
- Sedation chart
- Complication form
- Endoscopy report

17. References

- ASGE guidelines
- ESGE guidelines
- NICE colorectal cancer guidelines
- WHO endoscopy safety protocols