



ACADEMY OF MEDICINE, SINGAPORE

PRACTICE GUIDELINES

GASTROINTESTINAL ENDOSCOPY

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ACADEMY OF MEDICINE, SINGAPORE
16 COLLEGE ROAD, #01-01
COLLEGE OF MEDICINE BUILDING
SINGAPORE 0316

GASTROINTESTINAL ENDOSCOPY

PRACTICE GUIDELINES

1. TRAINING

A practitioner should have received formal training in a particular procedure before he/she is granted the right to practise it.

Training in gastrointestinal endoscopy should be part of higher training in medical or surgical gastroenterology within a framework of patient care. It should therefore occur after an entry qualification for higher training has been obtained. The following aspects are relevant :

- a) Indications, cost benefit considerations
- b) Pre procedural evaluation of the patient
- c) Explanation to the patient including the obtaining of informed consent
- d) The endoscopic procedure
- e) Post endoscopic evaluation and follow up
- f) Correlation of endoscopic findings with radiological and pathological data
- g) Deciding when endoscopic procedures are inappropriate.

Trainees should observe a required number of procedures and perform another set number under supervision before performing them independently. A log book should be kept and reviewed periodically by the training supervisor.

1.1 PROPOSED PRACTICAL TRAINING

The following sets out the minimal number of diagnostic endoscopic procedures that must be performed by the trainee under supervision before he is considered competent in the respective procedures. The trainee would be assessed by an independent supervisor/assessor on completion of his training.

Upper Gastrointestinal Endoscopy

At least 150 procedures under supervision.

Paediatric Upper Gastrointestinal Endoscopy

As in adult upper gastrointestinal endoscopy, ie. 150 procedures under supervision, with an additional 50 procedures in children under supervision.

Colonoscopies

At least 50 complete colonoscopies achieved under supervision.

Endoscopic Retrograde Cholangio Pancreatography (ERCP)

Should have experience in upper gastrointestinal endoscopy. At least 50 successful diagnostic ERCPs under supervision.

Flexible Sigmoidoscopy

At least 25 flexible sigmoidoscopies under supervision.

Handbooks specially designed for the above purposes are to be filled up and signed by supervisor for assessment purposes.

Training for therapeutic endoscopy should begin after a trainee is deemed competent in diagnostic endoscopy.

2. TRAINING CENTRES AND TRAINING SUPERVISORS

Endoscopy should be taught in centres which provide an overall gastroenterology service with co-operation between physicians, surgeons, radiologists and pathologists. Preferably, such centres should also offer structured, accredited training programmes in gastroenterology and/or gastrointestinal surgery.

Regular joint meetings are desirable to achieve good standards of patient care.

Records should be maintained of all procedures, including indications, findings and complications.

An endoscopy training supervisor should be a sound, well-trained clinician and an accredited and actively practising endoscopist who continually maintains and improves his abilities.

3. GASTROINTESTINAL ENDOSCOPY AREAS

Endoscopic procedures should normally be performed in a designated area, with its own complement of nursing staff, clerks and porters. If this is not available, the operating theatre or emergency room can also be used.

Radiographic screening should be available.

Capability for bedside endoscopy should be available for special situations.

Apparatus for suction, monitoring and cardio pulmonary resuscitation equipment are prerequisites for an endoscopy area. Endoscopy (nurse) assistants are also necessary. Other requirements include an instrument cabinet, storage area for drugs, disinfectants etc, sinks, toilet facilities and a recovery area (unless no sedation is to be used).

4. AUDIT

Some form of audit should be performed periodically. Relevant issues include correctness of indications, results of diagnostic and therapeutic procedures as well as complications. Auditing will help to maintain the standards and competence of endoscopy practice.

4.1 INDICATIONS FOR THE VARIOUS PROCEDURES IN GASTROINTESTINAL ENDOSCOPY

The Committee has drawn up a list of indications for the following procedures to prevent their abuse (for monetary gains among other things), taking into consideration our local needs and conditions.

4.1.1 INDICATIONS FOR GASTROSCOPY

A. Initial Evaluation

General

- Upper abdominal pain or dyspepsia (If gastroscopy has been done by an accredited endoscopist within the last year with a normal result, there is normally no indication for a repeat examination)
- Unexplained anorexia and weight loss
- Haematemesis and melaena

- Unexplained iron deficiency anaemia or positive faecal occult blood
- Evaluation of an abnormal barium meal
- Unexplained elevation of CEA (after colonic clearance)
- Evaluation of an unexplained upper abdominal mass

Esophageal

- Dyphagia or odynophagia
- Non-cardiac chest pain
- Evaluation of possible caustic injury

Gastroduodenal

- Severe and recurrent vomiting of unknown cause
- Exclusion of active peptic ulcer prior to major surgery, anti coagulation or haemodialysis when a history of previous gastrointestinal haemorrhage or ulcer disease is present
- To obtain duodenal tissue or fluid

B. Follow-up

- Follow - up of discrete esophageal or gastric ulcers to demonstrate healing
- Follow up of duodenal ulcer where a special indication exists, e.g. medical therapy following a major complication, intractable symptoms after medical treatment

- Follow up of dysplastic lesions and certain pre-malignant states including adenomatous polyps, Barrett's esophagus and familial polyposis coli.

C. Therapeutic

- Upper gastrointestinal bleeding
- Polyp removal
- Placement of tubes including percutaneous endoscopic gastrostomy (PEG).
- Relief of obstruction
- Foreign body removal

4.1.2. INDICATIONS FOR COLONOSCOPY

A. Initial Evaluation

- Unexplained gastrointestinal bleeding: Hematochezia without a convincing perianal source, melaena with a negative upper gastrointestinal workup, unexplained positive fecal occult blood and/or iron deficiency anaemia
- Recent change (< 1 year) in bowel habits in a patient > 40 years of age
- Evaluation of chronic diarrhoea
- Evaluation of suspected polyp or neoplasm on barium enema
- Unexplained elevation of CEA
- Evaluation of large intestinal OR low small intestinal obstruction

B. Follow-up

1. Surveillance for colonic neoplasia
 - a. Examination to "clear" entire colon of synchronous or neoplastic polyps in a patient with a treatable cancer or neoplastic polyp
 - b. Follow up examination at 2-3 year intervals after resection for colorectal cancer or neoplastic polyp and an adequate initial "clearing" colonoscopy
 - c. Patients with chronic ulcerative colitis: colonoscopy every 1-2 years with several biopsies for detection of cancer and dysplasia in patients with:
 - (i) Pancolitis of > 7 years' duration (surveillance is done independent of symptom activity)
 - (ii) Left sided colitis of > 15 years' duration (no surveillance is needed for disease limited to the rectosigmoid).
2. Chronic inflammatory bowel disease of the colon if more precise diagnosis or assessment of the extent of activity of disease will influence immediate management

C. Therapeutic

- Removal of polyps
- Treatment of haemorrhage
- Treatment of obstruction/stricture
- Decompression of the colon

D. Additional Indications for Flexible Sigmoidoscopy

- Acute diarrhoea, if containing blood or if associated with antibiotic use
- Follow up of inflammatory bowel disease when there is a change in clinical status
- Evaluation of a palpable mass on rectal examination
- Initial diagnosis of irritable bowel syndrome
- Family history of polyposis coli

4.1.3 INDICATIONS FOR ERCP

A. Diagnostic

- Evaluation of the jaundiced patient suspected of having biliary obstruction
- Evaluation of the patient without jaundice whose clinical presentation suggest pancreatic or biliary tract disease
- Evaluation of signs or symptoms suggesting pancreatic malignancy when results of indirect imaging (e.g. Ultrasound, CT, MRI) are equivocal or normal
- Evaluation of recurrent or persistent pancreatitis of unknown etiology
- Preoperative evaluation of the patient with chronic pancreatitis
- Evaluation of possible pancreatic pseudocyst undetected by CT or ultrasound and for known pseudocyst prior to planned surgical therapy
- Evaluation of the sphincter of Oddi and bile duct by biliary and pancreatic manometry

- Evaluation of post operative complications of biliary surgery

B. Follow-up

- To determine ductal clearance following sphincterotomy for stones

C. Therapeutic

1. Endoscopic sphincterotomy
 - a) Choledocholithiasis (in post cholecystectomy patients or patients with intact gall bladder who are not candidates for surgery)
 - b) Papillary stenosis or sphincter of Oddi dysfunction
 - c) Prior to placement of biliary stents or balloon dilation of biliary stricture
 - d) Sump syndrome
 - e) Choledochocoele
 - f) Ampullary carcinoma in patients who are not candidates for surgery
2. Stent placement across benign or malignant strictures, biliary fistula or in "high risk" patients with large, unremovable common duct stones
3. Balloon dilation of biliary strictures

4. Nasobiliary drain placement for prevention or treatment of acute cholangitis or infusion of chemistry agents for common duct stone dissolution

5. CONTINUING MEDICAL EDUCATION

All practising endoscopists should be encouraged to keep up and upgrade their skills especially in therapeutic procedures by periodic attendances at endoscopy workshops and seminars locally and abroad.

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