**Supplementary file 1**

# ENDOSCOPIC PROCEDURES: SPECIFIC INDICATIONS AND STATEMENTS

## ESOPHAGOGASTRODUODENOSCOPY (EGD)

- Upper abdominal symptoms that persist despite an appropriate trial of therapy or associated with other symptoms or signs suggesting structural disease (e.g., anorexia and weight loss) or new-onset symptoms in patients aged 50 years or older.
- Dysphagia or odynophagia.
- Oesophageal reflux symptoms that persist or recur despite appropriate therapy.
- Persistent vomiting of unknown cause.
- Other diseases in which the presence of a upper gastrointestinal (GI) pathology might modify other planned management. (e.g., patients who have a history of GI bleeding who are scheduled for organ transplantation, long-term anticoagulation, patients with cancer of the head and neck).
- Familial adenomatous polyposis syndromes.
- For confirmation of and specific histologic diagnosis of radiologically demonstrated lesions (e.g., suspected neoplastic lesion).
- Non-urgent GI bleeding: presumed chronic blood loss and iron deficiency anemia when the clinical situation suggests an upper GI source or when colonoscopy does not provide an explanation.
- When sampling of tissue or fluid is indicated.
- Selected patients with suspected portal hypertension to document or treat oesophageal varices.
- To assess diarrhea in patients suspected of having small-bowel disease (e.g., celiac disease).
- Non-urgent treatment of bleeding lesions such as ulcers, tumors, vascular abnormalities

- Removal of selected lesions.
- Placement of feeding or drainage tubes.
- Dilation and stenting of stenotic lesions.
- Management of achalasia and palliative treatment of stenosing.
- Endoscopic therapy of intestinal metaplasia.
- Intra-operative evaluation of anatomic reconstructions typical of modern foregut surgery
- Management of operative complications (e.g., stenting of anastomotic disruption, fistula, or leaking in selected circumstances).
- Sequential or periodic EGD may be indicated for surveillance of malignancies in patients with pre-malignant conditions (e.g., Barrett's oesophagus, polyposis syndromes, gastric adenomas, tylosis, or previous caustic ingestion).

**COLONOSCOPY/FLEXIBLE SIGMOIDOSCOPY**

- Evaluation of an abnormality at barium enema or other imaging study that is likely to be clinically significant, such as a filling defect and stricture.
- Evaluation of unexplained non-urgent GI bleeding/iron deficiency anemia.
- Screening and surveillance of colonic neoplasia
- For dysplasia and cancer surveillance in selected patients with long-standing ulcerative or Crohn's colitis.
- For evaluation of patients with chronic inflammatory bowel disease of the colon, if a more precise diagnosis or determination of the extent of activity of disease will influence management.
- Clinically significant diarrhea of unexplained origin.
- Intra-operative identification of a lesion not apparent at surgery (e.g., polypectomy site, location of a bleeding site) or evaluation of anastomotic reconstructions typical of surgery to

treat diseases of the colon and rectum (e.g., evaluation for anastomotic leak and patency, bleeding, pouch formation).

- Treatment of non-urgent bleeding from such lesions as vascular malformation, ulceration, neoplasia.
- As an adjunct to minimally invasive surgery for the treatment of diseases of the colon and rectum.
- Management or evaluation of operative complications (e.g., dilation of anastomotic strictures).
- Excision or ablation of lesions.
- Balloon dilation of stenotic lesions (e.g., anastomotic strictures).
- Palliative treatment of stenosing or bleeding neoplasms (e.g., laser, electrocoagulation, stenting).
- Marking a neoplasm for localization.
- Evaluation and treatment of anorectal disorders (e.g., banding of hemorrhoids).
- Surveillance of the rectum after subtotal colectomy (e.g., in familial adenomatous polyposis and ulcerative colitis).
- Evaluation of pouchitis.
- To obtain rectal and distal colon biopsy specimens for the evaluation of systemic diseases or infections (e.g., cytomegalovirus, graft-versus-host disease, and amyloidosis).

**ENDOSCOPIC RETROGRADE CHOLANGIOPANCREATOGRAPHY (ERCP)**

- The jaundiced patient suspected of having biliary obstruction.
- The patient without jaundice whose clinical and biochemical or imaging data suggests pancreatic duct or biliary tract disease.

- Evaluation of signs or symptoms suggesting pancreatic malignancy.
- Evaluation of pancreatitis of unknown etiology.
- Pre-operative evaluation of the patient with chronic pancreatitis and/or pseudocyst.
- Endoscopic sphincterotomy.
- Stent placement across benign or malignant strictures, fistulae, post-operative bile leak, or in high-risk patients with large unremovable common duct stones.
- Dilation of ductal strictures.
- Balloon dilation of the papilla.
- Nasobiliary drainage placement.
- Pancreatic pseudocyst drainage in appropriate cases.
- Tissue sampling from pancreatic or bile ducts.
- Ampullectomy of adenomatous neoplasms of the major papilla.
- Therapy of disorders of the biliary and pancreatic ducts.
- Facilitation of cholangioscopy and/or pancreatoscopy.

**ENDOSCOPIC ULTRASOUND (EUS)**

- Staging tumors of the GI tract, pancreas, bile ducts, and mediastinum, including lung cancer.
- Evaluating abnormalities of the GI tract wall or adjacent structures, or of the pancreas and the biliary tree.
- Tissue sampling of lesions within, or adjacent to, the wall of the GI tract.
- Placement of fiducials into tumors within or adjacent to the wall of the GI tract.
- Treatment of symptomatic pseudocysts by creating an enteral-cyst communication.
- Drug delivery (e.g., celiac plexus neurolysis).

- Providing access into the bile ducts or pancreatic duct, either independently or as an adjunct to ERCP.
- Evaluation for acute and chronic pancreatitis.
- Evaluation for peri-anal and peri-rectal disorders (anal sphincter injuries, fistulae, abscesses).
- Evaluation of patients at increased risk of pancreatic cancer.

**DEVICE-ASSISTED ENTEROSCOPY (DAE)**

- Evaluation of the source of GI bleeding not identified by EGD or colonoscopy.
- Evaluation of an abnormal radiographic imaging study of the small bowel.
- Localization of known or suspected small-bowel lesions.
- Therapy of small-bowel lesions beyond the reach of a standard endoscope.
- Tissue sampling from the small bowel.
- Surveillance of patients with polyposis syndromes that involve the small bowel, such as familial adenomatous polyposis and Peutz-Jeghers syndrome.
- To facilitate ERCP in patients with post-surgical anatomy.
- For tube placement in the small bowel (e.g., feeding jejunostomy).
- Dilation of strictures.
- Evaluation after small-bowel transplantation.

**VIDEOCAPSULE ENDOSCOPY (VCE)**

- Evaluation of obscure GI bleeding/iron deficiency anemia in a patient for whom there is no cause as identified by upper and lower endoscopy.
- Evaluation of the small bowel in patients with known or suspected Crohn’s disease.

- Screening and surveillance of the small bowel in patients with inherited polyposis syndromes.
- Suspected small intestinal tumors.
- Suspected or refractory malabsorptive syndromes (e.g., celiac disease).

Adapted from

"Appropriate Use of GI Endoscopy. ASGE Standards of Practice Committee; Dayna S Early, Tamir Ben-Menachem et al. Gastrointest Endosc. 2012 Jun;75(6):1127-31."

**Supplementary file 2**

## ENDOSCOPY TRIAGE CHECKLIST

Patient's Surname _____ Name _____

Date of Birth _____ Age (y.o.) _____ Sex (M/F) _____

Is the endoscopic investigation correctly indicated (See Indications List – Supplementary file 1)?

□ Yes □ No

If NO → schedule an outpatient visit with a gastroenterologist in order to re-evaluate the indication or the need for further investigation.

If YES:

a. Has the patient had symptoms compatible with CoViD-19 manifestations in the last 14 days? (fever, cough, dyspnea, diarrhea, rhinitis or conjunctivitis, ageusia, anosmia)

   □ Yes □ No

b. Has the patient had contacts with CoViD-19 positive subjects over the last 14 days?

   □ Yes □ No

c. Is the patient's current temperature ≥37.3 °C, measured by infrared thermometer (forehead/temporal artery)?

   □ Yes □ No

d. Has the patient had a positive RT-PCR test for SARS-CoV-2 in the last 14 days?

   □ Yes □ No

- If all (*a*,*b*,*c*,*d*) NO → fit for endoscopy in low-risk room.
- If at least one YES between *a, b* or *c* and point-of-care testing* not available → postpone endoscopy or, if impossible, schedule it in high-risk room.
- If at least one YES between *a, b* or *c* <u>but</u> point-of-care testing negative → fit for endoscopy in low-risk room.
- If *d* YES or if point-of-care testing positive → postpone endoscopy or, if impossible, schedule it in CoViD-19 positive room.

* serologic (IgM) or RT-PCR rapid test for SARS-CoV-2