DIAGNOSTIC INDICATIONS FOR UPPER GASTROINTESTINAL ENDOSCOPY IN OESOPHAGEAL AND GASTRODUODENAL DISEASE IN ADULTS, EXCLUDING ENDOSCOPIC ULTRASONOGRAPHY AND ENTEROSCOPY

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Guidelines Department
Diagnostic indications for upper gastrointestinal endoscopy in oesophageal and gastroduodenal disease in adults, excluding endoscopic ultrasonography and enteroscopy

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GUIDELINES

These guidelines concern “Diagnostic indications for upper gastrointestinal endoscopy in oesophageal and gastroduodenal disease in adults, excluding endoscopic ultrasonography and enteroscopy”. They do not concern patients with HIV. The three issues dealt with are:

1- Which clinical signs and/or laboratory values should lead to oesophageal and gastroduodenal imaging or endoscopy, and which form of investigation should be used? The signs suggested are dysphagia, nausea and vomiting, dyspepsia, upper gastrointestinal bleeding, and anaemia.

2- What are the upper gastrointestinal indications for diagnosis and follow-up of gastro-oesophageal reflux, ulcers, and portal hypertension without bleeding?

3- What are the indications for duodenal biopsy?

The literature on this subject often consists of editorials, case series, guidelines based on experts’ opinions and studies with a very questionable design. These guidelines are therefore based mainly on the opinion of experts.

I. Isolated dysphagia and/or odynophagia

In dysphagia or odynophagia, discussion and clinical examination guide the diagnosis towards:

- A preoesophageal origin: upper gastrointestinal endoscopy is not recommended as first choice. An ENT examination is the first choice of investigation, completed by dynamic swallowing studies;
- An oesophageal origin: upper gastrointestinal endoscopy is recommended as the first choice examination, whatever the situation.

II. Persistent isolated nausea or vomiting

In the event of isolated nausea or vomiting persisting for more than 48 hours, investigation of the upper gastrointestinal tract is justified after any non-gastrointestinal origin and acute intestinal occlusion have been eliminated. When the origin is thought to be gastroduodenal, endoscopy is preferable to radiological examination.

III. Dyspepsia

Upper gastrointestinal endoscopy is recommended in dyspepsia:

- in subjects aged over 45 years and/or if there are any warning signs or symptom(s) such as anaemia, dysphagia, weight loss or any other warning signs and symptoms;
- in subjects aged under 45 years with no warning signs or symptoms, upper gastrointestinal endoscopy is recommended in the following situations:
  - positive diagnostic test for *Helicobacter pylori*,

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- in subjects aged under 45 years with no warning signs or symptoms, upper gastrointestinal endoscopy is recommended in the following situations:
  - positive diagnostic test for *Helicobacter pylori*,
– when symptomatic treatment has failed or recurrence occurs at the end of treatment.

IV. Chronic anaemia and/or iron deficiency

Upper gastrointestinal endoscopy is recommended in iron-deficiency anaemia and/or iron deficiency, after any non-gastrointestinal origin has been eliminated:
- as first choice:
  – when the clinical context suggests a problem in the upper gastrointestinal tract,
  – in a patient whose general state of health is poor (very old, concomitant disease);
- in all other cases, after inconclusive colonoscopy and, if possible, during the same anaesthesia session.

V. Acute gastrointestinal bleeding originating in the upper gastrointestinal tract

Upper gastrointestinal endoscopy is recommended as first choice in acute digestive bleeding which is assumed to originate in the upper gastrointestinal tract (haematemesis or melaena). Endoscopy should be performed rapidly and in any case not more than 24 hours after the episode of bleeding. Endoscopy should be performed under conditions which allow any therapeutic procedures required to be carried out at the same time.

Upper gastrointestinal endoscopy should be repeated when bleeding persists or when a first investigation including upper gastrointestinal endoscopy and colonoscopy has been inconclusive. In contrast, control endoscopy of the efficacy of haemostatic treatment of an ulcer is not justified unless there is rebleeding.

VI. Gastro-oesophageal reflux

Endoscopy is not indicated immediately when there are typical symptoms of gastro-oesophageal reflux, i.e. a combination of heartburn and acid regurgitation, if the patient is aged under 50 years and does not have any concomitant warning signs (weight loss, dysphagia, bleeding, anaemia).

Upper gastrointestinal endoscopy is recommended if there are symptoms of gastro-oesophageal reflux combined with warning signs (weight loss, dysphagia, bleeding, anaemia), or if the patient is aged over 50 years, or if there is a recurrence on withdrawal of treatment or resistance to medical treatment.

Upper gastrointestinal endoscopy is indicated, after non-gastrointestinal origin has been eliminated, if there are atypical symptoms which may be related to gastro-oesophageal reflux (nocturnal cough, asthma, pain mimicking angina, hoarseness, burning sensation in the pharynx, ear pain).
VII. Barrett’s oesophagus

Barrett’s oesophagus is diagnosed by upper gastrointestinal endoscopy and biopsy. Both endoscopy and biopsy are necessary to diagnose dysplasia in Barrett’s oesophagus. The dysplasia should be confirmed by a second endoscopy performed two to three months after the first, with antisecretory therapy in the meantime.

The requirement for endoscopic monitoring is justified by the risk of dysplasia and cancer of the oesophagus.
- Endoscopy completed with multiple biopsies according to a specific protocol is recommended every two to three years in Barrett’s oesophagus with intestinal metaplasia and no dysplasia.
- Endoscopy is recommended for monitoring low-grade dysplasia (endoscopy every six months for one year, then every year). Monitoring should be discontinued when high-grade dysplasia is observed or when it appears unlikely that continued monitoring will increase survival.

VIII. Peptic ulcer

In a patient with typical or atypical symptoms of ulcers, upper gastrointestinal endoscopy is recommended as first choice:
- in all patients aged over 45 years with typical or atypical ulcers;
- in patients aged under 45 years:
  - with warning signs or symptoms such as anaemia or weight loss,
  - with a positive diagnostic test for Helicobacter pylori,
  - if symptomatic treatment has failed in a patient aged under 45 years.
Multiple biopsies should be performed routinely in patients with gastric ulcers.

Control endoscopy is not recommended in asymptomatic patients after treatment for a duodenal ulcer.

A control endoscopy may be performed as part of follow-up of a gastric ulcer, particularly if:
- the patient is aged 45 years;
- symptoms persist despite appropriate medical therapy;
- interpretation of biopsies is not clear;
- the initial endoscopic appearance was unusual.

If there is clinical suspicion of ulcers in a patient treated with non-steroidal anti-inflammatory drugs (NSAIDs), upper gastrointestinal endoscopy is recommended if symptoms persist after a few days following withdrawal of gastrototoxic drugs, or if it is not possible to withdraw NSAID therapy.

IX. Portal hypertension
Upper gastrointestinal endoscopy for diagnostic purposes is recommended if portal hypertension is suspected, and particularly when cirrhosis is diagnosed, to look for any oesophageal or gastric varices.

Follow-up endoscopy is recommended every two years in patients with cirrhosis in whom endoscopy did not reveal any varices at the time of diagnosis.

A control endoscopy is recommended after endoscopic treatment for oesophageal varices to check that the varices have been eradicated.

X. Duodenal biopsy

Duodenal biopsy during upper gastrointestinal endoscopy is indicated in the following situations (agreement among professionals):
- iron-deficiency anaemia with no identified cause;
- folic acid deficiency (combined with gastric biopsy);
- other nutritional deficiencies;
- isolated chronic diarrhoea;
- dermatitis herpetiformis;
- to evaluate response to a gluten-free diet in coeliac disease;
- when certain parasites are suspected after a negative parasitological stool examination (lambliasis, strongyloidiasis).