Barrett's esophagus - How often do we think about it in everyday practice?

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INTRODUCTION

Barrett's oesophagus (BE) is the precursor to oesophageal adenocarcinoma, which carries a poor prognosis and it is likely that all endoscopists and gastroenterologists will encounter Barrett's oesophagus in their clinical practice. Careful assessment and management of patients who have Barrett's oesophagus with endoscopic surveillance and endoscopic endotherapy aims to reduce the risk of progression to invasive adenocarcinoma**.**

But how often we think about BE?

One of our big mistake during practical work is not allowing sufficient time for careful inspection of the oesophagus during endoscopy. At least 1 minute should be spent inspecting each centimetre segment. The mucosa should be cleaned with a mucolytic agent and the patient made comfortable with proper sedation. Attention should be paid to the right wall and proximal segment as this is where early cancers are most commonly found.

GEJ, as defined in North America, is the junction between the tubular esophagus and proximal stomach. The location of GEJ is approximated by the most proximal extent of the gastric folds In Asia, this is determined by locating the distal extent of palisade of longitudinal veins. The squamocolumnar junction (SCJ), also known as the Z-line, is the junction of the squamous mucosa and columnar mucosa. It is normally somewhat irregular in appearance. The location of SCJ and GEJ may not coincide endoscopically.

The normal person has no columnar-lined esophagus (CLE), defined as metaplastic cardiac epithelium (with and without parietal and/or goblet cells). The esophageal squamous epithelium normally transitions directly to gastric oxyntic epithelium at the gastroesophageal junction (GEJ) without interposed cardiac epithelium.

The occurrence of cardiac metaplasia at the normal GEJ results from exposure of the most distal esophageal squamous epithelium to gastric contents during times of gastric overdistension.

A diagnosis of **Barrett's esophagus** requires evidence on endoscopy with biopsy confirmation of intestinal metaplasia extending at least 1 cm into the esophagus proximal to the gastroesophageal junction, or Z line.

Barrett's esophagus has been generally accepted as *a complication of chronic and severe GERD.*

Squamous islands are descrete areas of whitish or pale-colored squamous epithelium, seen at endoscopy, that are surrounded by columnar Barrett's epithelium.

Columnar islands are discrete areas of columnar BE, seen at endoscopy, surrounded by paler-colored squamous esophageal epithelium and discontinuous from the circumferential and maximal extent of Barrett's segment.

In pts with **classic esophagitis**, biopsies are usually **not taken** unless necessary to exclude *neoplasm, infection, pill injury, or bullous skin diseases.*

Therefore, the current **primary indication for esophageal biopsies** is to determine the presence of **Barrett's epithelium**. When this diagnosis is suspected, biopsies are mandatory and best done *when esophagitis is healed*

Short segment Barrett esophagus is defined by the presence of columnar-appearing mucosa in the distal esophagus (< 3 cm in length) with intestinal metaplasia on biopsy. SSBE is defined as ≥ 1 cm to < 3 cm BE. LSBE is defined as ≥ **3 cm** Barrett's esophagus.

Surveillance today involves early detection of dysplasia by high definition - white light microscopy (HD-WLM) with *random 4-quadrant biopsies every 2 cm* (or every 1 cm if dysplasia is known or suspected) followed by *biopsy of mucosal irregularity* (nodules, ulcers or visible lesions).

References

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