Diagnosis of Barrett’s oesophagus and Follow UP in Lothian 2014

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Diagnosis of Barrett’s oesophagus (1)

- Endoscopic not pathologic diagnosis – histology helps but primary diagnosis is by careful endoscopy

- Intestinal metaplasia is not a pre-requisite for diagnosis in UK

- Careful recognition of OG junction is essential

- OG junction is represented by the top of the gastric folds with minimal air insufflation

- Document extent of circumferential (C) and maximum (M) extent (cm) of Barrett’s
**PRAGUE CRITERIA**
For Endoscopically Suspected Esophageal Columnar Metaplasia/Barrett’s Esophagus

Developed by the Barrett’s Oesophagus Subgroup of the International Working Group for the Classification of Reflux Oesophagitis (IWGCO).

1. Ensure Hiatus Hernia is Recognised by Distinguishing Diaphragmatic Hiatal Impression From Gastroesophageal Junction

2. Locate Gastroesophageal Junction By Depth Of Endoscope Insertion* At Level Of:
   - tops of gastric mucosal folds
   - sphincter “pinch”
   = 36 cm

3. Look For Displacement Of Squamocolumnar Junction Above Gastroesophageal Junction

4. Measure Depth Of Endoscope Insertion* At The Most Proximal Circumferential Extent Of Suspected Columnar Metaplasia*
   = 33 cm

5. Measure Depth Of Endoscope Insertion* At The Maximum Extent Of Suspected Columnar Metaplasia*
   = 29 cm

6. Subtract the Depth of Insertion for Circumferential and Maximum Extents from the Depth of Endoscope Insertion at the Gastroesophageal Junction*:
   :36 cm - 33 cm = C3
   :36 cm - 29 cm = M7
   Prague C3 and M7

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* To the nearest centimeter

† Squamous and columnar islands do NOT contribute to measures of extent

‡ To the nearest centimeter, except when areas of columnar metaplasia are estimated to be less than 1 cm, report this as <1cm
Defining the proximal extent of the gastric folds should be done with minimal air insufflation (see image B).

Effects of air insufflation and respiration on position of top of gastric folds
Optimising conditions

Good endoscopes

Good technique

Good mucosa

Good documentation
Diagnosis of Barrett’s oesophagus (2)

- Look carefully with best endoscope available – preferably high resolution with magnification and NBI or FICE

- Wash surface mucus/fluid away with water to clear view

- Document presence & severity of any oesophagitis

- Document any focal visible lesions and target for separate biopsies (see later)

- Retroflex and withdraw scope up into Barrett’s from below – some subtle lesions may otherwise be missed
Attention to small islands
Diagnosis of Barrett’s oesophagus (3)

• Do not rush into biopsies – spend longer looking and target any subtle surface irregularities first

• Then take 4-quadrant biopsies every 2cm or 1cm if short segments e.g. 2-3cm long

• If in doubt – take multiple photos and/or video if available for review

• Label site of biopsies clearly and send pathologist a copy of full endoscopy report – they need this to aid biopsy interpretation
1.5% acetic acid
Is it Barrett’s?

Yes – short tongues of columnar mucosa (C0M1)
it Barrett’s?

Yes – a subcentimetre tongue at 3 o’clock position
Yes – a tiny 5mm tongue only but magnification shows pit pattern is that of Barrett’s
Be careful at the Z-line:

Gastric pits

Barrett’s
Post-procedure (diagnosis)

- Inform patient likely findings but need to await biopsies
- Recommend symptomatic treatment of any associated GORD symptoms or oesophagitis
- Once biopsies available – write to patient and GP
- Send patient information leaflet, from either CORE or FORT websites:
  - FORT: http://www.refluxhelp.org/
  - CORE: http://www.corecharity.org.uk/
- For new diagnosis, arrange to see patient once in new GI OP clinic
- Then contact Alison Barnes, CBO, WGH to arrange long-term surveillance arrangements
Barrett’s diagnosis, surveillance and management

Suspected Barrett’s?

Classify using – Prague criteria + photographs

Endoscopic assessment good?
- Good view? good tolerance?
  Absence of oesophagitis?

Yes

No /not clear

4-quadrant biopsies every 2cm or 1cm if short segment (<3cm)

Dysplasia

Yes

No dysplasia

LGD

Repeat every 6/12 with 4-Q biopsies every 1-2cm; until no dysplasia x2

Refer to MDT; and for HRE/mapping (Dr Penman)
If focal visible lesion, classify using Paris system

HGD

Add/increase PPI and repeat 6/12

Repeat 1y

No dysplasia

No /not clear

PPI or increase dose for 2/12
Repeat OGD with sedation if required

* If <3cm, IM –ve, then repeat and discharge if IM-ve again
How to deal with focal lesions within Barrett’s

- Document, photograph and biopsy carefully
- Send biopsies marked ‘urgent’ to pathology
- Inform patient of possibility of an abnormal area, need for urgent pathology and arrangements for follow-up
- If in doubt contact Dr Penman, Dr Trimble, Dr Plevris or Dr Church to discuss management
Focal lesion: what's it like?

- **Location** – take care in hiatal hernia or at OGJ
- **Size** – in cm and % circumference
- **Pathology** – not G3 (poor differentiation)
- **Multiplicity**?
- **Morphology**.....
Describing superficial visible lesions in Barrett’s

- Not all small lesions are ‘early’ or amenable to endoscopic therapy.

- Use the Paris classification to describe morphology –

  0-I = raised lesion

  0-II = flat

    IIa = slightly elevated
    IIb = truly flat
    IIc = slightly depressed

  0-III = depressed ulcer
Case selection: lesion morphology
Case selection:
lesion morphology

0-I
0-IIa
0-IIc
0-III
Is it multifocal?
Barrett's oesophagus: case selection

- Has there been MDT discussion?
  - review of pathology & staging
  - fitness
  - co-morbidities
  - minimally invasive surgery
  - patient preferences
Indications for endoscopic treatment

• In general:
  – Unifocal, limited size (< 2cm);
  – Mucosal, no local lymphnodes involved;
  – Well / moderately differentiated neoplasia.

• Relative:
  – Size > 2 cm (piece meal resection);
  – (minimal) submucosal invasion;
  – Less well differentiated lesions.
What to do with Dysplasia or cancer in Barrett’s

• Inform patient and GP/referring clinician

• Refer urgently to upper GI MDT
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  - Tel: 242-3649
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• Provide all information and casenotes