GMCA GREATER MANCHESTER COMBINED AUTHORITY

NHS in Greater Manchester

Greater Manchester **Cancer**

Oesophageal-Gastric Pathway Board

Barrett's Dysplasia Management Algorithm.

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The British Society of Gastroenterology published detailed guidelines on the diagnosis and management of Barrett's oesophagus in 2013 (ref 1) which should be followed with regards the endoscopic reporting, biopsy protocol and surveillance for non-dysplastic Barretts.

1) Indefinite for (Low Grade) Dysplasia:

Given the difficulties associated with the management of the 'indefinite for dysplasia' category, all such cases should also be reviewed by a second GI pathologist, and the reasons for use of the 'indefinite for dysplasia' category should be given in the histology report in order to aid patient management (Recommendation grade C).

Patients with a diagnosis of indefinite for dysplasia should be managed with **optimisation of antireflux medication and repeat endoscopy in 6 months.** If no definite dysplasia is found on subsequent biopsies, then the surveillance strategy should follow the recommendation for non-dysplastic Barrett's oesophagus. (Recommendation grade C).

2) Barretts Low Grade Dysplasia:

The management of low grade dysplasia (LGD) was previously limited to endoscopic surveillance (refs 1-2) but following subsequent publications showing the increased risk of cancer progression in true LGD (refs 3-5) and the benefit of radiofrequency ablation (RFA) these BSG guidelines have now been amended along with NICE approval (ref 6) to state that **patients with an initial diagnosis of flat Barretts LGD should have a repeat endoscopy in 6 months time**.

If flat LGD is found in any of the subsequent follow up OGDs and is confirmed by two expert GI pathologists, the patient should then be offered endoscopic ablation therapy after review by the specialist MDT. If ablation is not undertaken, 6-montly surveillance is still recommended *(Recommendation grade A for endoscopic therapy and C for surveillance)*.

3) Barretts High Grade Dysplasia:

Following a diagnosis of Barretts high grade dysplasia (HGD) **all cases should be treated as a cancer in terms of 2 week wait pathway**, for investigations and outpatient clinics, with **all cases discussed at the sMDT with an interventional endoscopist present**.

Prior to any further investigation or intervention the patient should be reviewed in clinic by the interventional endoscopist to discuss management options and assess fitness.

There is no indication for routine CT scanning prior to endoscopic resection (ER) unless the initial endoscopist thought this to be a cancer at the index endoscopy. Before ER, neither CT nor PET–CT have a clear role in the staging of patients with Barrett's HGD or suspected T1 cancer and neither is routinely required (Recommendation grade B).

For cases which are thought to be equivocal in terms of endoscopic resectability, following sMDT discussion and review of the endoscopic images, then endoscopic ultrasound is the staging modality of choice to exclude a T2 lesion or lymphadenopathy and this should be done at the same visit just prior to the ER to inform the therapeutic decision (Recommendation grade C).

Over 80% of HGD will be visible macroscopically (as a nodule or ulceration) when assessed by an expert using high definition endoscopy and **all visible lesions should be endoscopically resected at that time.** For the **20% of patients with true non-visible "flat" HGD then HALO radiofrequency ablation should be undertaken at that visit.**

After ER the case should be rediscussed at the sMDT with histopathology determining the resection margins, both depth and lateral margins, plus assessing for submucosal invasion, lymphovascular or perineural invasion.

Any residual flat Barretts should subsequently be eradicated by radiofrequency ablation/APC to reduce recurrence risk.

Patient should remain under annual endoscopic surveillance for at least 5 years post ER.

All Barretts HGD patients should be included in the annual National Oesophago-Gastric Cancer audit.

All Barretts endotherapy should only take place at the oesophago-gastric surgical centre.

References:

1 Fitzgerald, R.C., et al., *British Society of Gastroenterology guidelines on the diagnosis and management of Barrett's oesophagus.* Gut, 2013.

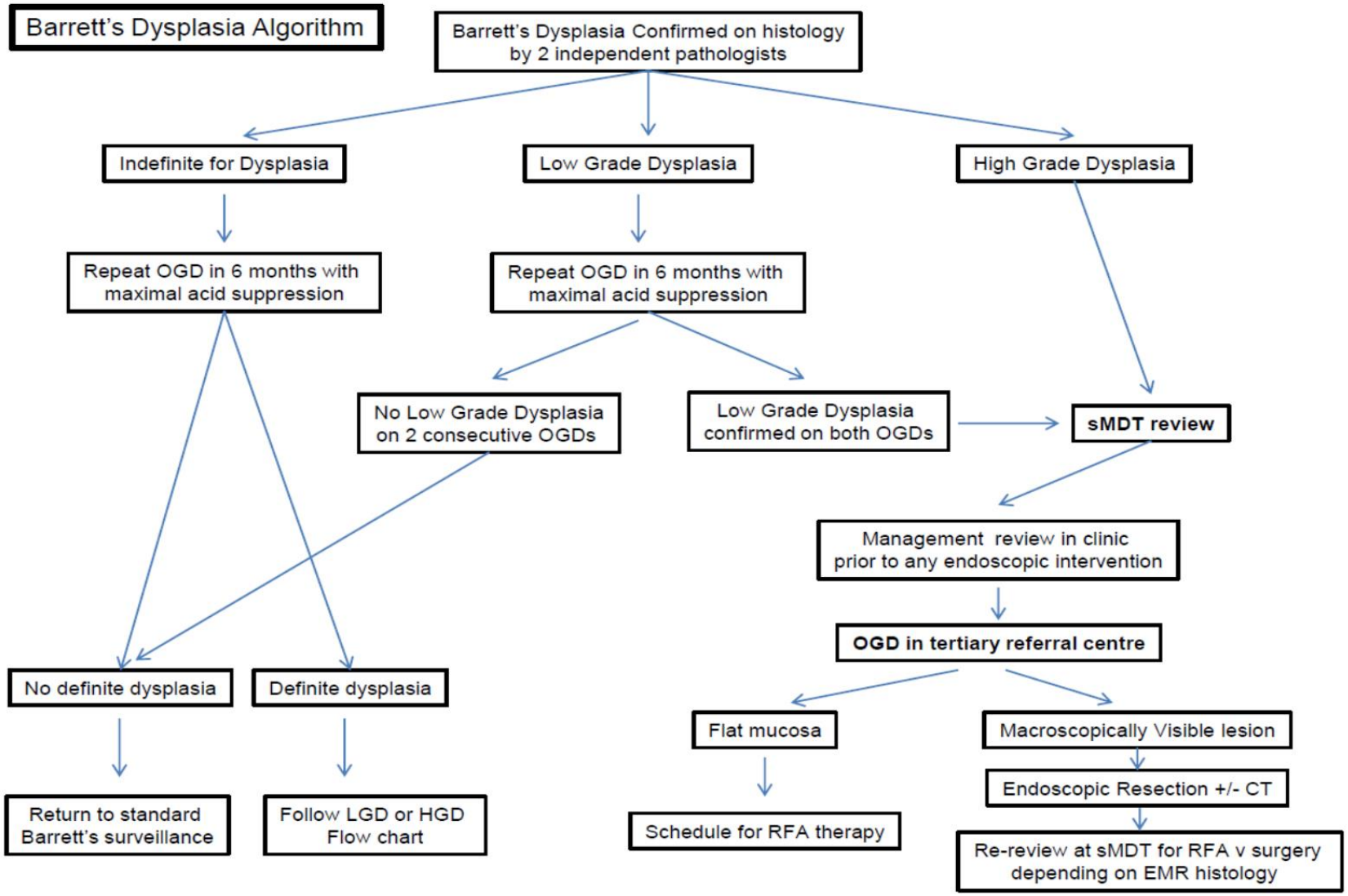
2 Curvers, W.L., et al., *Low-grade dysplasia in Barrett's esophagus: overdiagnosed and underestimated.* Am J Gastroenterol, 2010. 105(7): p. 1523-30.

3. Duits, L.C., et al., *Barrett's oesophagus patients with low-grade dysplasia can be accurately risk-stratified after histological review by an expert pathology panel.* Gut, 2014.

4. Singh, S., et al., *Incidence of esophageal adenocarcinoma in Barrett's esophagus with low-grade dysplasia: a systematic review and meta-analysis.* Gastrointest Endosc, 2014. 79(6): p. 897-909 e4; quiz 983 e1, 983 e3.

5. Phoa, K.N., et al., *Radiofrequency ablation vs endoscopic surveillance for patients with Barrett esophagus and low-grade dysplasia: a randomized clinical trial.* JAMA, 2014. 311(12): p. 1209-17.

6. NICE, *Endoscopic radiofrequency ablation for Barrett's oesophagus with low-grade dysplasia or no dysplasia.* http://www.nice.org.uk/guidance/IPG496/chapter/1-Recommendations, 2014.


Barrett's Dysplasia Algorithm
Barrett's Dysplasia Confirmed on histology by 2 independent pathologists
Indefinite for Dysplasia
Low Grade Dysplasia
High Grade Dysplasia
Repeat OGD in 6 months with maximal acid suppression
Repeat OGD in 6 months with maximal acid suppression
No Low Grade Dysplasia on 2 consecutive OGDs
Low Grade Dysplasia confirmed on both OGDs
sMDT review
Management review in clinic prior to any endoscopic intervention
OGD in tertiary referral centre
No definite dysplasia
Definite dysplasia
Flat mucosa
Macroscopically Visible lesion
Endoscopic Resection +/- CT
Return to standard Barrett's surveillance
Follow LGD or HGD Flow chart
Schedule for RFA therapy
Re-review at sMDT for RFA v surgery depending on EMR histology