

Colonic Polyps – Large or Complex - Full Clinical Guideline

Reference no.: CG-ENDO/4187/23

Contents

1. Introduction – objectives and definitions
2. Actions at index colonoscopy
3. Actions following index colonoscopy if polypectomy not performed
4. Actions at repeat colonoscopy
5. Actions following polypectomy
6. Audit
7. Appendices

Introduction

This clinical guideline mirrors current Bowel Cancer Screening Programme practice and is designed to require the same standards, facilities and endoscopy unit time to be available for symptomatic service colonoscopy patients

This clinical guideline has been developed to achieve the following objectives:

- The requesting consultant is responsible for the decision to proceed to EMR/polypectomy and further procedures / clinic reviews should be booked by the requesting consultant not by the endoscopist. The endoscopy report should be directed to the original requesting consultant who will make a decision. In the event of complications or queries from the patient it is essential that it is clear which consultant made the decision to proceed to EMR/polypectomy and took responsibility for the patient being appropriately consented for this procure
- Patients will not be exposed to the risks of EMR without proper consent for the procedure
- Patients will not be referred for surgical resection for benign polyps that could be removed endoscopically
- The recurrence rates for EMR will be as low as possible
- The complication rates for removal of large polyps will be as low as possible
- Malignant polyps will have their position marked by tattoos as often as possible
- Piecemeal resection of malignant polyps will be avoided as often as possible
- The number of endoscopic procedures to which patients are subjected will be reduced as much as possible
- The time delay to definitive treatment will be as short as possible

Issues related to anticoagulant and anti-platelet agents are discussed in a separate policy.

Working Definitions

For the purposes of this policy the following definitions will apply:

- **EMR:** The piecemeal or en-bloc endoscopic resection of sessile or flat polyps using fluid lift
- **Pedunculated polyps:** Polyps with a clearly defined stalk
- **Sessile polyps:** Polyp for which the widest diameter is at the point of attachment, and which do not satisfy the criteria for “flat polyps”
- **Semi-pedunculated polyps:** Polyps where the widest diameter is not at the point of attachment but where there is no defined stalk (also known as sub-pedunculated)
- **Flat polyps:** Polyps that protrude less than 2.5mm above the surrounding mucosa (estimated by comparison to closed biopsy forceps)
- **Lateral-spreading lesions:** Sessile or flat lesions greater than 10mm in diameter which have a predominant lateral-spreading growth pattern (abbreviated to **LST**)
- **Non-lifting:** Lesions that do not lift adequately following a correctly placed sub-mucosal injection of fluid
- **Significant bleeding:** Bleeding that requires hospital admission or transfusion

2.0 Actions at Index Colonoscopy

2.1 Pedunculated Polyps

- Pedunculated polyps of any size with good access should generally be removed at the index colonoscopy
- Efforts should be made to ensure that there is a clear margin (ideally 2mm) between the head of the polyp and the diathermy excision margin
- Tattoos should be placed to mark the site for polyps which show any of the following characteristics (unless in rectum):
 - a) A head >2cm
 - b) An irregular or ulcerated surface
 - c) A Kudo type V crypt pattern
- Pedunculated polyps that are too large for a 25mm snare or which have very difficult access may be deferred until another occasion at the discretion of the colonoscopist. Such polyps may be referred for excision by a more experienced colonoscopist. This referral must be made by the original requesting consultant not the endoscopist
- Endoscopic techniques to reduce bleeding risk following polypectomy (such as use of loops, clips or adrenaline injections) may be employed at the discretion of the colonoscopist.
- All pedunculated polyps should be retrieved for histopathological examination.

2.2 Sessile, Semi-pedunculated and Flat Polyps

- Sessile, semi-pedunculated or flat polyps should be removed at the index colonoscopy unless:
 - a) They are larger than 20 mm in maximum diameter
 - b) They are in a high risk position (*see below*)
 - c) They show high risk features for invasive malignancy (*see below*)
- Sessile or flat lesions situated beyond the sigmoid that require diathermy for removal should be lifted by submucosal injection to increase safety of excision
- Lesions of any size may be lifted using the suggested “standard lifting mixture” or saline if <1.5cm at the discretion of the colonoscopist (*see appendix 1*)
- Lesions not removed at the index colonoscopy should be documented with several good quality photographs
- Lesions not removed at the index colonoscopy should have their position marked by tattoo unless they are in the rectum
- Biopsy should not be performed unless there are strong grounds to believe that subsequent endoscopic resection will not be possible or appropriate (*see below*)

2.3 High Risk Positions

Sessile, semi-pedunculated or flat polyps that require diathermy for excision might *not* be suitable for removal at the index colonoscopy if they are situated:

- a) Within 2mm of the appendix orifice
- b) Within 1mm of a diverticular opening
- c) On an anastomotic suture line
- d) On the ileo-caecal valve opening

2.4 High Risk Features

Sessile, semi-pedunculated or flat polyps might not be suitable for removal at the index colonoscopy if they show any of the following features:

- a) Kudo type V crypt pattern
- b) Central depression
- c) Surface ulceration
- d) Non-lifting
- e) Tethering or in-drawing of surrounding mucosal folds

2.5 Lateral Spreading Lesions > 2cm in diameter

- Lateral spreading lesions >2cm should not generally be removed at the index colonoscopy
- They should be documented with several good quality photographs
- Position should be marked by a tattoo distal to the polyp (i.e. closer to the anus) unless in the rectum (see Trust Guideline: *Colonoscopy Tattoo – Full Clinical Guideline*)
- Biopsy should not be performed unless there are strong grounds to believe that subsequent endoscopic resection will not be appropriate (e.g. because of size, position or suspicion of malignancy)
- If biopsy is performed, samples should be taken from the edge or from a protruding part of the lesion to avoid submucosal fibrosis

2.6 Multiple polyps

In rare cases there may be so many polyps present that endoscopic removal of them all is impractical or inappropriate (e.g. because a genetic condition is likely for which colectomy is indicated). Under these circumstances a large polyp which would otherwise be removed might be left in-situ

2.7 Distal polyps in the presence of a proximal cancer

Having biopsied a proximal cancer it is currently recommended that distal polyps should not subsequently be removed during the same procedure because of the risk of seeding. Clear instructions should be included in the endoscopy report recommending early post-operative colonoscopy and polypectomy

3 Actions following index colonoscopy if polypectomy not performed

The report should be sent to the requesting consultant for consideration and to request any further procedures they deem appropriate.

Repeat colonoscopy for EMR/ polypectomy should not be requested by the endoscopist, the report should be directed to the original requesting consultant who will make a decision as below. In the event of complications or queries from the patient it is essential that it is clear which consultant organised the EMR/polypectomy and that the patient has been appropriately consented for this procure

A decision should be reached about which of the following pathways to follow:

- A. Repeat colonoscopy by an appropriate colonoscopist for EMR/polypectomy
- B. Review patient in clinic to discuss management. This is especially important in the presence of comorbidities/ for older patients where it may or may not be appropriate to proceed with colonoscopy and EMR/polypectomy

C. Direct referral to Significant Polyp and Early Colorectal Cancer (SPEC) MDT Derby & Nottingham

- Occasionally, histology will be required before the decision can be made. Histology will be available to the requesting consultant
- If a repeat colonoscopy/EMR is required, this should be a “double slot” (at least)
- Patients listed for repeat colonoscopy/EMR should be provided with the patient information leaflet describing the EMR procedure and risk of complications
- If histology confirms malignancy the patient should be discussed at the Colorectal Cancer MDT
- If, in the opinion of the index procedure colonoscopist, a polyp without confirmed malignancy is not suitable for endoscopic removal because of its size, position or endoscopic features, the report, colour photographs (or preferably a video clip) and any histology should be reviewed by the requesting consultant
- Polyps without confirmed malignancy can be referred to the SPEC MDT but only after discussion with at least one experienced EMR colonoscopist
- If surgical resection is advised by the SPEC MDT, the patient will be referred to the colorectal MDT
- If endoscopic resection is advised as a result of MDT discussion, this should be performed by an EMR colonoscopist

4. Actions at repeat colonoscopy

- If the polyp is judged suitable for endoscopic resection a second colonoscopy will be requested by the requesting consultant as above (double slot at least)
- If EMR is undertaken, this should use standard lifting mixture (*see appendix 1*)
- The diathermy machine used and settings should be recorded in the report
- EMR sites should be documented with several good quality photographs
- Further tattoos may be required
- As much of the polyp as possible should be retrieved for histology
- If breach of muscle layer at EMR is suspected then patient should be offered admission to hospital for overnight observation. If pain develops then early imaging with CT is advised.
- Patients are advised not to leave the country (especially on long-haul flights) for two weeks following large lesion EMR
- A contact number to ring in the event of late complications should be given to the patient

5. Actions following polypectomy

- A check of the EMR site should be booked for 3 months for all polyps >20mm unless histology indicates complete excision (en bloc)
- When checking an EMR site for residual adenoma, dye spray and/or iScan should be used
- If further treatment for polyp remnants is required at 3 months, a further site check is required at a subsequent 3 month interval
- When the colonoscopist is satisfied the polyp has been completely cleared, a further 1 year (from the index colonoscopy) is required *as per BSG guidelines*

- **Large Polyp Audit**

The following outcomes will be subject to local audit:

- Percentage of polyps, which subsequently prove to be malignant, that have their position marked by a tattoo (excluding rectum)
- Percentage of EMRs in which subsequent histology shows malignancy
- Delays to definitive treatment for polyps that subsequently prove to be malignant
- Persistence rates for EMR at 3 months
- Persistence rates for EMR at 6 months
- Persistence rates for EMR at 9 months
- Persistence rates for EMR at 12 months
- Perforation rates for EMR
- Significant bleeding rates for EMR
- Number of cases referred to surgery for polyps which subsequently prove to have benign histology
- Deaths or serious complications resulting from surgery for polyps with benign histology

Documentation Control

Development of Guideline	Dr Stephen Hearing
Consultation with:	
Approved By:	UHDB Endoscopy Users Group – 13/6/23 Medical Division June 2023
Review Date:	June 2026
Key Contact:	Dr Stephen Hearing
Date of Upload:	31/07/2023

Appendix 1

Suggested Composition of fluid for Submucosal Injection

Lesions \leq 1.0cm

10ml Saline +/- methylene blue or indigocarmine

Lesions $>$ 1.0cm

Consider defining the submucosal plane with saline first then use Standard Lifting Mixture made up in a 500ml Gelofusin bag as follows:

Standard Lifting Mixture:

Gelofusin®	500ml
Indigocarmine 0.8%	5ml (or methylene blue 1-2mL)
Adrenalin 1:10,000	5ml