NHS Lothian Endoscopy Adult Biopsy Protocol

This protocol summaries the current published guidelines for endoscopic biopsies and highlights areas for local best practice recommendations.

If there is a particular clinical concern or atypical feature, please document this clearly in the endoscopy report to aid the pathological interpretation. If additional lesions or areas of abnormality are also biopsied, please also provide a description of the abnormality and good quality photo documentation where possible.

Disease Type	Published Guidelines	NHS Lothian
Barrett's Oesophagus	Please use Prague classification for identifying landmarks. Seattle protocol: quadrantic biopsies every 2cm in addition to sampling any visible lesions is recommended for all patients undergoing surveillance who have confirmed IM. ¹	Recommendations
Eosinophilic Oesophagitis	six biopsies should be taken from at least two different sites in the oesophagus & targeted biopsies from visible areas of mucosal surface abnormality (e.g., white spots, furrows). ²	To improve diagnostic accuracy 2 biopsies from each of lower, middle and upper oesophagus in separate pots along with targeted sampling of visible white plaques or strictured areas.
GOJ Ulcers & Oesophagitis	Oesophageal ulcers and grade D oesophagitis or atypical in appearance or suspicious for cancer, should be biopsied. 3	
Oesophageal Strictures (not Schatzki rings)	Strictures should be biopsied to exclude malignancy before dilatation. ³	Minimum of 6 biopsies of oesophageal strictures.
Gastric or oesophageal Cancer Gastric Ulcers	A malignant looking lesiona minimum of six biopsies taken. ³	
Gastric Polyps (not fundal gland polyps)	We recommend that gastric polyps other than fundic gland polyps (FGPs) should be biopsied for histopathological assessment. ⁴	
Gastric Intestinal Metaplasia / Atrophy	separate biopsies from the gastric antrum and body should be taken. ³	Sydney protocol 2 non- targeted samples each from the antrum and body plus one from the incisura in separate pots plus samples of any visible lesions. ⁵

NHS Lo	thian Endoscopy Adult Biopsy Protocol v1	November 2022	1/4
Author	s – S Din, G Masterton, D Worral, N Church, C Noble	Review Date November 2024	

Disease Type	Published Guidelines	NHS Lothian Recommendations
Gastric Helicobacter Pylori for Microbiological Culture not histopathology		obtain multiple gastric biopsies (5-6), at least 2 from the antrum and 2 from the anterior and posterior bodies in a separate pot for each sample. ⁶
Coeliac Disease	a minimum of four biopsies should be taken, including representative specimens from the second part of the duodenum and at least one from the duodenal bulb. ⁷	2 x D1 & 4 x D2 biopsies taken by single biopsy in separate pots for D1 and D2 (i.e. 2 pots). ⁸
IBD Diagnosis & Assessment	Section 3.1 UCtwo biopsy specimens should be taken from five sites throughout the examined bowel, including the ileum and rectum, during the initial endoscopic evaluation. Section 4.1.3 CD segmental colonic and ileal biopsies (to look for microscopic disease). ⁹	Preference for 2 biopsies from terminal ileum, caecum, ascending, transverse, descending, sigmoid and rectum in separate pots to aid diagnostic accuracy and disease distribution. Please see additional footnote*
IBD Surveillance	Pancolonic dye spraying with targeted biopsy of abnormal areas is recommended. If chromoendoscopy is not used, the strategy of random biopsy outlined in the 2002 guideline should be followed – quadrantic biopsies every 10cm. ¹⁰	In addition to targeted biopsies where possible, random biopsies should continue to be taken in patients considered to high risk such as PSC, tubular shortened colon, chronic active inflammation and previous history of colonic neoplasia. 11
IBD Surveillance Ileo-anal- pouch (IAP)	yearly in patients with previous rectal dysplasia or dysplasia or colorectal cancer at the time of pouch surgery or primary sclerosing cholangitis or type C mucosa (mucosa exhibiting permanent persistent atrophy and severe inflammation) in the pouch 5-yearly of pouch/rectal mucosa in patients with none of the risk factors above. 10	
Diarrhoea normal colonoscopy to exclude microscopic colitis	right sided biopsies preferredleft also suitable. ⁹	2-4 right (including transverse), left and rectum biopsies in separate pots.

NHS Lothian Endoscopy	Adult Biopsy Protocol v1	November 2022	2/4
Authors – S Din, G Maste	erton, D Worral, N Church, C Noble	Review Date November 2024	

	Minimum of 2 right and 2 left colon biopsies which also includes rectal. ¹²	
Disease Type	Published Guidelines	NHS Lothian Recommendations
Colonic Cancer		a minimum of 6-8 biopsies taken.
Colonic Polyps Colonic Hyperplastic Polyps Contribute to high-risk findings ^{12,13}	Follow BGS post-polypectomy and post-colorectal cancer resection surveillance guidelines. ^{13,14}	Only biopsy if changes concerning for cancer and target these areas.
Large pedunculated and non-pedunculated polyps		Please use Size/Morphology/Site/Access (SMSA) scoring. ¹⁵ If not appropriate for removal take good quality pictures and only biopsy areas where there are concerning/ malignant changes.

^{*}IBD diagnosis & assessment. At the endoscopist discretion it may also be suitable to do a more restricted set of biopsies such as 2-4 right (including transverse), left and rectum biopsies in separate pots for example in UC disease assessment.

NHS Lothian Endoscopy Adult Biopsy Protocol v1	November 2022	3/4
Authors – S Din, G Masterton, D Worral, N Church, C Noble	Review Date November 2024	

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NHS Lothian Endoscopy Adult Biopsy Protocol v1	November 2022	4/4
Authors – S Din, G Masterton, D Worral, N Church, C Noble	Review Date November 2024	