

over time. The MR sign indicates a potentially difficult ESD and reduces the chance of a complete resection.

Methods We performed a Clip Muscle Protection (CliMP) method, in which clips are attached at the base of the retracting muscle during colonic ESD, for 6 benign polyps. When MR sign was encountered during ESD, the surrounding submucosal layer was dissected to expose retracted muscle and endoclips were applied at the base of the tented area. This sealed the muscle and allowed further resection above the clipped area.

Results A complete resection was possible in 4 out of 6 cases. Two CliMP cases are shown on the accompanying video. Morphologically they were broad based Ip in 5/6 polyps at the sigmoid colon, the final lesion was a LST nodular mixed type at the rectosigmoid junction. The median size of the polyps was 45 mm in diameter (range between 35–75 mm). No complications were observed. No electrocautery effect was observed at the clip attachment site. All 6 lesions were found to be tubular or tubulovillous adenomas with high grade dysplasia on histopathological analysis. R0 resection was achieved for all of the four completed cases; two procedures were abandoned due to a broad MR sign in one and an inability to access the whole of the lesion due to sigmoid fixation in the other.

Conclusions CliMP method appears to allow continuous deeper dissection without complication in lesions demonstrating MR sign during colonic ESD.

REFERENCE

1. Toyonaga, *et al.* Clinical significance of the muscle-retracting sign during colorectal endoscopic submucosal dissection. *EIO* 2015

P25

SIGMOID LOOPING: CREATION OF DOMAINS FOR A MAGNETIC ENDOSCOPE IMAGING-BASED SCORE

^{1,2}Shiran Esmaily*, ¹Iosif Beintaris, ³John Anderson, ⁴Sunil Dolwani, ⁴James East, ¹John Hancock, ⁵Neil Hawkes, ⁶Brian McKaig, ⁷Paul O’Toole, ⁸Brian Saunders, ¹⁰Zacharias Tsiamoulos, ¹Chris Wells, ¹Matt Rutter. ¹Gastroenterology, University Hospital of North Tees, UK; ²Newcastle University, UK; ³Gastroenterology, Gloucestershire Hospitals, UK; ⁴Gastroenterology, Cardiff and Vale NHS Trust, UK; ⁵Gastroenterology, Royal Glamorgan Hospital, UK; ⁶Gastroenterology, East Kent Hospitals, UK; ⁷Translational Gastroenterology Unit, John Radcliffe Hospital, UK; ⁸Endoscopy, St Mark’s Hospital, UK; ⁹Gastroenterology, Royal Wolverhampton Hospital, UK; ¹⁰Gastroenterology, Royal Liverpool and Broad Green Hospital, UK

10.1136/gutjnl-2020-bsgcampus.100

Introduction The 2013 national colonoscopy audit found that pain or looping were the most common reasons for incomplete colonoscopy. Sigmoid colon intubation is the most painful part of colonoscopy and looping may occur even in the hands of expert endoscopists. Magnetic endoscope imaging (MEI) facilitates loop identification and resolution. The aim of this study was to identify components of looping and, from these, reach consensus on which should form sigmoid looping domains for an MEI-based sigmoid looping score.

Methodology A panel of 12 endoscopists from across the UK, with a range of experience in colonoscopy, took part in a modified Delphi consensus process. A detailed PubMed literature search was performed to identify prior studies. Potential components of sigmoid looping were extracted and provided to the panel as statements, along with an evidence summary. Statements were voted and commented on anonymously and adjusted through subsequent voting and discussion rounds to

achieve consensus. Consensus was defined in advance as >80% agreement.

Results 46 relevant papers were identified. One paper described a classification for sigmoid looping. A total of 4 Delphi rounds took place. 12/12 panel members took part in Delphi rounds 1 and 2, 11/12 in round 3 and 10/12 in round 4. Initially, consensus was gained on categories, followed by subcategories as the Delphi progressed.

Consensus was reached for 7 domains and for potential categorisation within each domain.

1. Loop Type (with definitions for each)
2. Scope shaft angulation (<90, 90–180, 180–270, >270 degrees, excluding scope tip)
3. Loop Size (Small, Medium, Large)
4. Loop duration (Minutes and seconds)
5. Loop Recurrence (Yes, No)
6. Extent of intubation on MEI (colonic segment)
7. MEI image quality (Adequate, Inadequate)

Results are summarised in Table 1.

Conclusion This is the first effort to develop consensus-based categorisation of sigmoid looping, as identified on MEI. It highlights components of looping that are measurable on MEI and provides a platform for further research into looping and pain. We now plan to validate each component by testing for interrater reliability. The score can then be used to research looping and pain in different contexts.

Abstract P25 Table 1

Component	Percentage Agree or neutral
Loop Type (n=11)	
1. Alpha	100% (11/11)
2. N-Spiral	100% (11/11)
3. Flat N (non spiral)	100% (11/11)
4. Reverse Alpha	100% (11/11)
5. Reverse N-Spiral	81.8% (9/11)
6. Complex	90.9% (10/11)
7. No Loop	100% (11/11)
Definition of Loop Type (n=10)	
1. Alpha	100% (10/10)
2. N-Spiral	100% (10/10)
3. Flat N (non spiral)	100% (10/10)
4. Reverse Alpha	100% (10/10)
5. Reverse N-Spiral	100% (10/10)
6. Complex	100% (10/10)
7. No Loop	100% (10/10)
Scope Shaft Angulation (n=11)	100% (11/11)
Loop Size (n=10)	90% (9/10)
Duration of Looping (n=11)	90.9% (10/11)
Loop Recurrence (n=11)	81.8% (9/11)
Extent of intubation (n=11)	90.9% (10/11)
Quality of MEI (n=11)	100% (11/11)