



## Background

Bowel cancer is the 4th most common malignancy in the UK. Bowel cancers arise from colonic polyps. One of the aims of colonoscopy is to identify polyps and remove them before they turn into cancer interrupting the adenoma - carcinoma sequence, reducing an individual's risk of cancer and reduce bowel cancer mortality.

Occasionally polyps are removed that are thought to be benign but when histologically assessed do harbour malignancy and these are termed "covert malignant polyps". A covert malignant polyp may not have been completely excised and the patient is at risk of residual malignancy (RM). Even if the malignant polyp has been completely excised the patient may have lymph node metastases (LNM) which may not be evident endoscopically either at the time of polypectomy or on subsequent endoscopic surveillance.

Risk of RM and LNM are influenced by polyp morphology (pedunculated vs sessile), histological depth of invasion (Haggitt score and Kikuchi score), whether the polyp was removed en bloc or piecemeal and histological features such as poor differentiation, presence of tumour budding, lymphovascular invasion<sup>1</sup>.

Future management decisions after removal of a covert malignant polyp can be difficult for clinicians, patients and multidisciplinary teams (MDT) with the main options of a surgical resection or intense endoscopic surveillance.

Predicting risk of RM is difficult. There is some guidance from national organisations such as the ACPBGI however locally the surgical team felt there had been a cluster of patients whom the risk of RM/LNM had been overestimated and had led to patient undergoing bowel resections for no RM/LNM to be found in the resected specimen. Therefore, the surgical department revised their risk protocol to help clinicians and patients with discussions.

The new protocol for sessile polyps is summarised below:

<p><b>Low risk polyp</b></p> <ul style="list-style-type: none"> <li>• R0 (cancer &gt;1mm from the resection margin)</li> <li>• Only 1 negative prognostic features*</li> </ul> <p><b>Recommendation: Surveillance</b></p>	<p><b>High risk polyp</b></p> <ul style="list-style-type: none"> <li>• R1 (cancer &lt;1mm from resection margin)</li> <li>• SM3 (in a sessile polyp)</li> <li>• &gt;1 negative prognostic feature*</li> </ul> <p><b>Recommendation: Resection</b></p>
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\*poor differentiation, LVI, tumour budding

## Aims

To retrospectively analyse the outcome of patients with covert malignant polyps using the New Protocol to ensure it is risk stratifying covert malignant polyps appropriately.

## Methods

We reviewed all covert malignant polyps excised over a 4 year period (Jan 2019 - Dec 2022) and using electronic records including CITO and Lorenzo collected data on polyp characteristics, MDT recommendations, clinic discussions and long term outcomes of the patients.

## Results

During the 4 year period there were 81 cases of covert malignant polyps identified at RDH. The median age at referral was 66 years old, range (48-88) with 54% male predominance. 23/81 (28%) were pedunculated vs 58/81 (72%) sessile polyps.

Using the New Protocol, surveillance was recommended for 56.9% (n=33/58) patients. Of these patients, 81.8% (n=27/33) had surveillance and the remaining 18.2% (n=6/33) underwent surgery, see Figure 1.

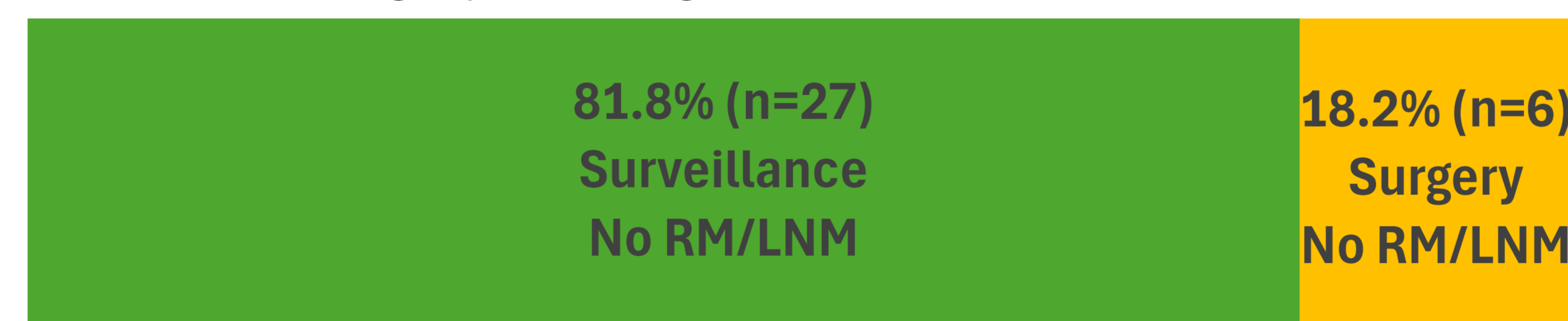


Figure 1 – Patients identified as requiring surveillance with the new protocol and RM/LNM outcomes

100% (n=6/6) of patients who had surgery were found to have no histological RM. The mean hospital admission was a median of 6 days (range 2-28). All patients who had endoscopic surveillance were all clear to FU over 29 months.

Using the New Protocol, surgery was recommended for 43.1% (n=25/58) patients, see Figure 2. Of these patients, 64.0% (n=16/25) had surgery with 31.3% (n=5/16) having RM or LNM in the resected specimen. 28.0% (n=7/25) had surveillance, with 42.8% (n=3/7) having recurrence on follow up endoscopy. 2.0% (n=2/25) had chemoradiotherapy due to rectal lesions in comorbid patients.

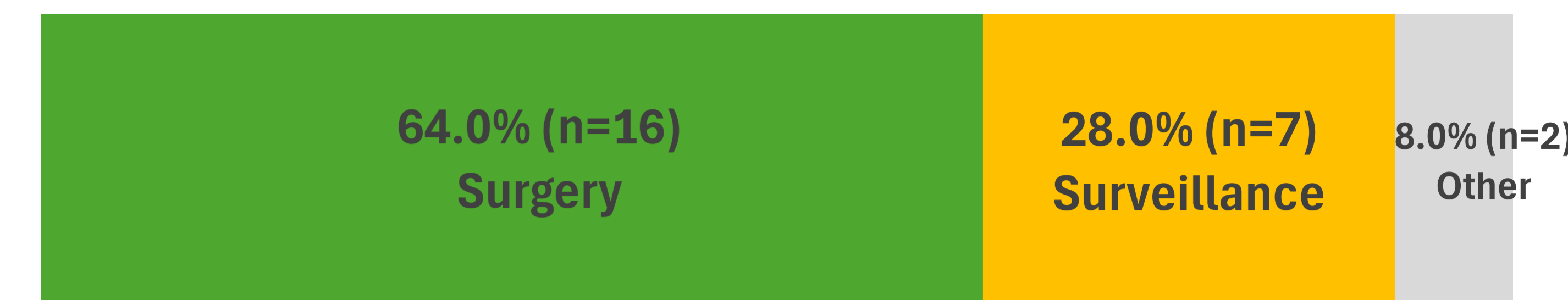


Figure 2 – Patients identified as requiring surgery with the new protocol

## Discussion

A position statement from ACPBGI suggests that a high potential risk of residual cancer is >20% and low <3%<sup>1</sup>. This data would support that the New Protocol is able to risk stratify covert malignant polyps into low and high risk accurately. No patients identified by the New Protocol as low risk and therefore requiring surveillance had any RM or LNM. This suggests that the protocol could have prevented unnecessary surgery and subsequent morbidity and hospital admission. Additionally, the New Protocol accurately identifies higher risk polyps and therefore is helpful for clinicians and patients to be guided towards surgery.

The final recommendation and patient decision will be influenced by many factors including patient desire to avoid surgery and potential stoma, comorbidities and patient acceptance of uncertainty with endoscopic surveillance. The New Protocol will help lead these challenging discussions and help patients and clinicians make an as informed decision as possible.

## Conclusions

The review concludes that the New Protocol implemented by the RDH surgical team is good at differentiating between low and high risk covert malignant sessile polyps. As a result, this can be an invaluable tool to assist the clinician and patient in future management decisions.

## References

1. Management of the malignant colorectal polyp: ACPBGI position statement, J. G. Williams, R. D. Pullan, J. Hill, P. G. Horgan, E. Salmo, G. N. Buchanan, S. Rasheed, S. G. McGee and N. Haboubi, Colorectal Disease (2013). The Association of Coloproctology of Great Britain and Ireland. 15 (Suppl. 2), 1–38