The Impact of Endoscopic Mucosal Resection on the Management of Complex Colorectal Polyps

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BACKGROUND

- Endoscopic mucosal resection (EMR) techniques have been proven to be safe and effective for managing complex polyps and should be offered as the first line treatment for large noninvasive polyps
- It can be challenging for endoscopists to identify which polyps may benefit from attempted endoscopic excision and subsequent referral to endoscopy centers offering EMR

AIM

- To evaluate how screening endoscopists in Nova Scotia are managing large polyps in order to target quality care initiatives aimed at improving access to EMR.

METHODS

- This was a retrospective observational quality review
- 196 patients in 2017 were found to have a polyp >2cm on review of FIT+ charts from an province wide screening colonoscopy electronic database
- After exclusions of 133 patients, 63 patients were included. 55 patients underwent EMR, 8 patients underwent surgical resection,
- Surgical resection included laparoscopic colonic resection as well as TEMS and TAMIS
- Electronic charts were reviewed to obtain endoscopy data, operative reports, clinic notes and pathology reviews

RESULTS

Procedure	Complications	Polyp characteristics	Attachment	Location	Endoscopic histology	Surgical pathology
Right hemicolectomy	none	4.8cm, over two folds	sessile	cecum	TVA no HGD	TVA with focal HGD
TAMIS	Leak managed conservatively	4cm, flat, 40-45% circumference	flat	rectum	TVA with no HGD	TVA with foci of HGD
Right hemicolectomy	none	2.5cm, failed to lift with central divot	sessile	Ascending colon	VA with HGD	T2 adenocarcinoma
Right hemicolectomy	none	3.5cm	sessile	Transverse colon	TVA with no HGD	Adenomatous polyp
TAMIS	none	3.5cm, 30% of lumen	sessile	rectum	VA with no HGD	TVA with no HGD
Right hemicolectomy	none	5.5cm LST	sessile	cecum	TVA with no HGD *incorrectly documented as adenocarcinoma which prompted surgery	TVA with no HGD
Anterior resection	none	4cm	sessile	Rectosigmoid	TVA with HGD	T2N0 adeno carcinoma
Right hemicolectomy	none	3cm, challenging angle	sessile	Cecum	TA with focus HGD	TA

- Of the 8 patients who underwent surgical resection for a large colonic polyp, 5 had a laparoscopic right hemicolectomy, 2 had TAMIS, and 1 had a laparoscopic anterior resection.
- 5 polyps were unresectable due to size, 1 failed to lift with submucosal injection, and 2 were unable to be removed due to location/angle of the scope.
- All polyps were biopsied as adenomas but 2 came back as early cancer on surgical pathology.
- 6 endoscopists referred for second opinion prior to surgical resection while 2 did not.
- We employed the criteria from recent 2023 national guidelines on polyp classification and management to review these cases and determined only one patient out of the 8 may have benefited from a referral to an endoscopy center offering advanced polypectomy.

CONCLUSIONS

- Quality reviews of referral patterns in colonoscopy screening databases are an effective strategy to assess educational needs of the endoscopists and to target quality care initiatives.
- Based on this limited review, community endoscopists in the zones where pathology was readily available are appropriately utilizing the advanced polypectomy pathways.

FUTURE DIRECTIONS

- A province wide referral pathway for complex polyps was implemented in 2020. An larger study is being conducted assessing the impact of this pathway
- A new province wide electronic medical record is currently being implemented. This system should improve access to pathology across all health care zones facilitating future quality audits
- Strategies to improve access to EMR include: 1) CME on classifying large polyps, thus identifying patients who should be referred to endoscopy centers offering advanced polypectomy, and 2) CME on how to document lesions appropriately that are being referred