

OC-027

**ENDOSCOPIC MUCOSAL RESECTION OF COLONIC POLYPS: A LARGE PROSPECTIVE SINGLE CENTRE SERIES**

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**Introduction** The traditional approach to the management of large colonic polyps has been surgery. Endoscopic mucosal resection (EMR) is an emerging technique for the removal of large colorectal lesions. Most of the published literature comes from Japan, with limited data regarding safety, efficacy and outcome in the west. We aim to assess the feasibility and safety of EMR in the colon in a western setting.

**Methods** A prospective review of patients undergoing EMR of colonic neoplasia >2 cm in size was performed. All patients were tertiary referrals from experienced consultants. The polyps were considered technically challenging due to size, difficult lesion access (peri-diverticular, peri-appendicular, touching the dentate line), or recurrences on previous EMR scars. They were referred to our service prior to surgical referral. Lesions were assessed using indigocarmine chromoendoscopy, and lesions with features suggestive of invasive malignancy were excluded. Completeness of resection was recorded by the endoscopist. Patients were followed up endoscopically where appropriate to assess for incomplete resection or recurrence.

**Results** 214 patients with 214 polyps underwent EMR. The mean size was 43 mm (range 20–150). 180 were flat and 46 were on the right side of the colon. Primary reason for referral was the size in 91 cases, lesion access in 107 cases and a previous failed resection in 16 cases. Endoscopic clearance at first attempt was achieved in 92% of cases. Residual or recurrent disease was seen at the first endoscopic follow-up in 17% cases requiring further endoscopic resection. Overall endoscopic

cure has been achieved in 95% of patients. Three patients went to surgery due to failed endoscopic resection. There were procedure related complications in 15/214 (7%) of cases. This consisted of delayed bleeding in nine patients, immediate bleeding in two cases and four post polypectomy syndrome. The risk of complications was independent of size or location. There were 13 cancers (7 > sm1 invasion) in flat polyps and 4 pedunculated polyp cancers (1 > Haggitt 2). 13 of these cases underwent surgery. Taking the cost of surgery as £12,000 and the cost of EMR as £561 this represents a potential cost saving of £2,231,946 for the cohort.

**Conclusion** This is the largest UK series demonstrating that EMR is a safe and effective treatment for large difficult polyps with an overall complication rate of 7%. It avoided surgery in 93% of cases with substantial cost savings. We believe that EMR of large and difficult benign polyps should be the new standard of care.

**Competing interests** None.

**Keywords** colonoscopy, endoscopic submucosal resection, polyp.