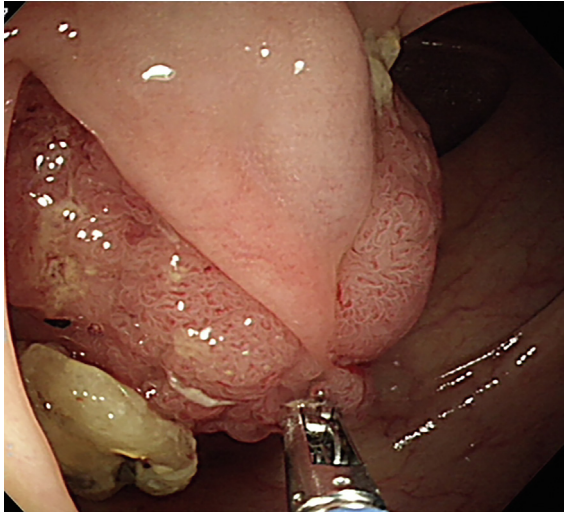


FOCUS ON...



ORIGINAL ARTICLE

Effect of prophylactic clip application for the prevention of postpolypectomy bleeding of large pedunculated colonic polyps: a randomized controlled trial

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Prophylactic application of a hemoclip has been suggested as an alternative to the use of an endoloop for the prevention of postpolypectomy bleeding (PPB) when resecting large, pedunculated colorectal polyps. Therefore, this multicenter, randomized controlled trial investigated the efficacy of prophylactic hemoclip application to reduce PPB during the resection of large pedunculated polyps. Large pedunculated polyps (≥ 10 mm in head diameter) were eligible for inclusion. Polyps were randomized into a study arm (where clips were applied before resection) and a control arm (without pretreatment). The primary outcome was the rate of PPB in each group. PPB included immediate PPB (IPPB) and delayed PPB (DPPB). IPPB was defined as blood oozing (≥ 1 minute) or active spurting occurring immediately after polyp resection. DPPB

was defined as rectal bleeding, occurring after completion of the colonoscopy. In total, 238 polyps from 204 patients were randomized into the clip arm (119 polyps) or the control arm (119 polyps). Overall bleeding adverse events were observed in 20 cases (IPPB, 16; DPPB, 4). The rates of overall PPB, IPPB, and DPPB were 8.4%, 6.7%, and 1.7%, respectively, for all polyps. The rates of overall PPB (clip 4.2% vs control 12.6%, $P = .033$) and IPPB (clip 2.5% vs control 10.9%, $P = .017$) were significantly lower in the clip arm than the control arm. Prophylactic clipping before resecting large pedunculated polyps can reduce overall PPB and IPPB compared with no prior treatment. Therefore, prophylactic clipping may be considered before resection of large pedunculated polyps.

Read this article on pages 148-54 in this issue.

ORIGINAL ARTICLE

Acute physiologic effects of N95 respirator use on gastroenterologists performing simulated colonoscopy

Asif Khalid, MD, Stephanie Romutis, MD, Jonathan Ibinson, Christopher Thomas, RN, Alex Myint, MD, Jeffrey Dueker, MD, Elyse Johnston, MD, Christianna Kreiss, MD, Michael Kingsley, MD, Wasseem Skef, MD, Kishore Vippera, MD, Kevin McGrath, MD, Anna Evans Phillips, MD, MS, Rohit Das, MD, Kenneth Fasanello, MD, James Ibinson, MD, PhD

During the severe acute respiratory syndrome coronavirus 2 pandemic, N95 filtering facepiece respirator (FFR) use is required while performing aerosol-generating procedures. The authors studied the physiological effects of N95 FFR use in a cohort of gastroenterologists performing simulated colonoscopies. Data collection and comparisons included (1) symptoms and change in vital signs in 12 gastroenterologists performing simulated colonoscopy for 60 minutes while wearing a surgical mask (SM) and face-shield (FS); N95 FFR, SM, and FS; and powered air-purifying respirator (PAPR) and (2) respiratory belt plethysmography and continuous EKG frequency-based heart rate variability indices including very low frequency power (measures intracardiac sympathetic tone) and low frequency to high frequency ratios (intracardiac sympathetic to vagal ratio) in 11 gastroenterologists performing simulated colonoscopy while wearing a SM (15 minutes), N95 FFR and SM (60 minutes), and SM (15 minutes) in rapid sequence. Ten of 12 (83%) gastroenterologists reported symptoms with N95 FFR use, most commonly breathing difficulty, frustration, fatigue, and headache. Nine (75%) of these gastroenterologists had associated significant heart rate elevation. Respiratory peak to trough measurement showed a significant increase ($F[2] = 7.543$, $P = .004$) during the N95 FFR stage, which resolved after removal of N95 FFR. Although not statistically different, all gastroenterologists showed a decrease in sympathetic to vagal ratio and an increase in intracardiac sympathetic effect in the N95 FFR stage. PAPR use was better tolerated but associated with headache and elevated heart rate in 4 (33%) gastroenterologists. N95 FFR use by gastroenterologists is associated with development of acute physiological changes and symptoms.

Read this article on pages 160-8 in this issue.