## **ASCRS 2021**

## View Abstract

**CONTROL ID:** 3488782

PRESENTATION TYPE: Research Forum

**CURRENT CATEGORY:** Benign Abdominal Disease

TITLE: Parastomal Hernia Rates and Exercise Following Ostomy Surgery

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ABSTRACT BODY:

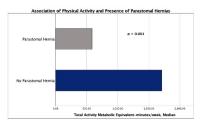
Purpose/Background: Parastomal hernias are common complications following ostomy surgery and can significantly affect patients' quality of life. The purpose of this study was to determine rates of and risk factors for parastomal hernias in patients who underwent surgery resulting in a permanent ostomy. We hypothesized that patients who engaged in more physical exercise would have a lower incidence of parastomal hernias.

Methods/Interventions: This was a retrospective cohort and survey study at a large academic medical center between 2014 and 2018. Patients were identified by surgical procedure codes for operations that included a permanent urostomy, colostomy, and/or ileostomy. A postal survey was conducted and included questions about parastomal hernia presence, symptoms, lifestyle, and validated instruments to measure stoma quality of life (Stoma Care QOL) and physical activity (IPAQ-SF). Demographic data and clinical data regarding medical comorbidities were abstracted from medical records. Descriptive statistics, chi-square tests, and Mann-Whitney U tests were performed.

Results/Outcome(s): 441 of 725 (60.8%) patients responded to the survey. 212 patients (48.1%) had urostomies, 159 (36.1%) had colostomies, and 97 (22.0%) had ileostomies. 127 patients (28.8%) self-reported a parastomal hernia diagnosis with rates of 27.1% for urostomy, 39.6% for colostomy, and 23.2% for ileostomy. Patients with parastomal hernias had significantly worse Stoma Care QOL scores (Median: 51.5 v. 58.0, p=0.003). The QOL subscales for self-esteem (p=0.008), relationships (p=0.011), and ostomy device function (p=0.002) were all worse amongst patients with parastomal hernias, while the sleep/fatigue subscale was not significantly different. There was a statistically significant association between less exercise [measured in total activity metabolic equivalent (MET)-minutes/week] and higher incidence of parastomal hernias (Median: 586.5 MET-minutes/week for those with parastomal hernias v. 1710 for those without; p=0.001). Prior surgery for any hernia (p=0.006) and obese/morbidly obese BMI (p<0.001) were found to be associated with parastomal hernia; however, reported heavy lifting, gender, COPD, smoking, cirrhosis/ascites, and emergency surgery were not significantly associated.

Conclusions/Discussion: Parastomal hernia rates remain high in modern surgical practice, and hernias are associated with poorer quality of life. This study shows an association between patients' physical activity and their rates of parastomal hernia, with a higher rate among patients who exercise less. Future research can be designed to test the effectiveness of postoperative physical and exercise therapy programs in preventing parastomal hernias and improving quality of life.

(No Table Selected)



Video File Upload: (none)

Educational Objective 1: Understand the association between ostomy patients' physical activity and their rates of parastomal hernias.

Educational Objective 2: Learn about risk factors for developing parastomal hernias and understand the effects of parastomal hernias on patient's quality of life

Educational Objective 3: (none)

Study Funding: This study was not funded

Funding Company: (none)

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