Parastomal Hernia with Intestinal Evisceration: A Common Problem with a Rare Complication

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Disclosures

• No conflicts to disclose
Case

48 year old female presented with sudden onset, right sided abdominal pain for 1 day

She noticed blood in her ostomy bag followed by the sudden protrusion of a loop of bowel through her ileostomy site

Surgical History

- Sigmoid colectomy
- Subtotal colectomy with ileorectal anastomosis
- End ileostomy
end ileostomy

eviscerated small bowel
Operative Course

Emergent laparotomy with extensive adhesiolysis

Eviscerated small bowel reduced into abdomen

Eviscerated loop was grossly hemorrhagic and ischemic and located 10 cm proximal to ileostomy

Ischemic bowel and ileostomy resection with creation of end ileostomy through existing abdominal wall defect

Parastomal defect partially primarily closed to circumference of the new end-ileostomy
Post-Operative Course

Post-operative ileus managed nonoperatively

Discharged to home POD 11

No acute complications at 2 week post-discharge follow-up and 6 month follow-up

Will follow patient yearly for continued evaluation and plan for elective definitive repair if parastomal hernia recurs and becomes symptomatic
Revised end ileostomy
Discussion

Parastomal hernias are incisional hernias with protrusion of intraabdominal contents through the created abdominal wall defect.

Parastomal hernias occur in up to 50% of ileostomies and rarely require emergent surgical intervention.
Devlin Classification

A. Subcutaneous
B. Interstitial
C. Peristomal
D. Intrastomal

Discussion (con’t)

Emergent surgery is indicated for patients with acute obstruction concerning for strangulation and bowel ischemia.

Surgical management of elective parastomal hernia repair includes repair with mesh or relocation of the stoma via an open or laparoscopic approach.
Conclusion

The emergent presentation of an obstructed parastomal hernia with ischemia and intestinal evisceration is unique.

Parastomal hernia with intestinal evisceration is a rare complication with less than 10 documented cases.

Intestinal evisceration most commonly occurred through ileostomies but three cases of evisceration through colostomies have been described.

Any parastomal hernia presenting with evisceration is a surgical emergency and requires consideration of possible bowel ischemia to guide surgical decision making.
References


Primary Spontaneous Pneumothorax Secondary to Vaping
S. Hung Fong, MD; J. Prince, MD; S. Misra, MD, MS, FACS; M. Siegman, MD
Background

- Spontaneous pneumothorax (SPX) – Primary or secondary
  - Primary – most common in young adults
  - Male > female (7.4 to 18 and 1.2 to 6 per 100,000/yr, respectively)

- Smoking – known to increase risk for primary SPX

- Vaping – not documented as a risk factor
  - One case report primary SPX associated with vaping
Case Presentation

HPI: 30 year-old male presenting with sudden onset of mid-sternal chest pain after a severe coughing fit following “a big hit on his vape”

PMH: asthma, kidney stones, chronic back pain

PSH: none

FH: Hypertension (mother and maternal grandmother)

Social Hx: former smoker, current vaping (e-Cig); cook
30 M

- ED vitals: T 36.8  BP 162/97  HR 72  Pulse Ox 92
- PE:
  - CV: Normal HR, regular, no murmurs
  - Chest: No breath sound on the right lung
- CBC and CMP: within normal limits
- CXR: Large right pneumothorax with left shift of mediastinum
CT scan post chest tube (CT)
CXR CT removal

BEFORE

AFTER
CT post IR – CT Re insertion
Right upper lobe wedge resection with large bulla. Right upper lobe wedge resection with small blebs. Mechanical pleurodesis.

- 32 Fr Blake Chest tube
HOSPITAL COURSE

Vaping increase in prevalence since 2009 to 2014
- 1.5% to 14% among the young population in US

Gene mutation associated with primary PTX – FLCN
- Act as tumor suppressor gene; Role in uptake of foreign body, and structural framework
- Alteration – increase inflammation $\rightarrow$ tissue damage $\rightarrow$ Bleb

High levels of aldehyde in exhaled breath during E- Cigarette vaping

Aldehyde causing DNA damage by increase free oxygen radical, an indirect malfunction of FLCN protein and inhibiting DNA repair
- Pro-inflammatory effect + lipid peroxidation $\rightarrow$ lung parenchymal injury
CONCLUSION

- Smoking is well known risk factor for primary SPX
  - Cessation is advisable to those at risk

- No documentation of vaping as a risk factor
  - In spite of the unknown correlation, vaping should be ceased

- Both cigarette and e-cigarette smoke contain high level of aldehyde, which may be the potential cause for the incidence of primary spontaneous pneumothoraces
Thank you!