

# Female Gender in Esophageal Intramucosal Adenocarcinoma Treated with Endoscopic Mucosal Resection: A Case Series

Patrick Hickey DO

*Lehigh Valley Health Network, Patrick.Hickey@lvhn.org*

Shashin Shah MD

*Lehigh Valley Health Network, Shashin.Shah@lvhn.org*

Hiral N. Shah MD

*Lehigh Valley Health Network, hiral\_n.shah@lvhn.org*

Follow this and additional works at: <http://scholarlyworks.lvhn.org/medicine>



Part of the [Gastroenterology Commons](#), and the [Medical Sciences Commons](#)

---

## Published In/Presented At

Hickey, P., Shah, S., Shah, H. (2015, May 19). *Female Gender in Esophageal Intramucosal Adenocarcinoma Treated with Endoscopic Mucosal Resection: A Case Series*. Poster presented at: Digestive Disease Week, Washington, DC.

This Poster is brought to you for free and open access by LVHN Scholarly Works. It has been accepted for inclusion in LVHN Scholarly Works by an authorized administrator. For more information, please contact [LibraryServices@lvhn.org](mailto:LibraryServices@lvhn.org).

# Female Gender in Esophageal Intramucosal Adenocarcinoma Treated with Endoscopic Mucosal Resection: A Case Series

Patrick Hickey, DO, Shashin Shah, MD and Hiral Shah, MD  
Lehigh Valley Health Network, Allentown, Pennsylvania

## Case Series Presentation

### Background

- Barrett's esophagus (BE) is a premalignant esophageal condition which may lead to dysplasia and esophageal adenocarcinoma (EAC)
- Incidence of BE is increasing
- High-grade dysplasia (HGD) carries significant risk of progression to EAC
- Patients with HGD and intramucosal adenocarcinoma (IMA) are treated with endoscopic mucosal resection (EMR) and radiofrequency ablation (RFA)
- Women have a lower risk of progression from BE to HGD or EAC
- Females diagnosed with HGD are presumed to have an equal risk of progression to IMA or EAC

### PATIENT 1:

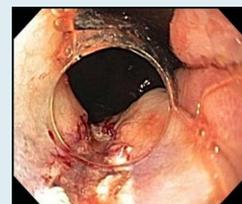
- 66 year old female with a history of pancreatic cancer and Whipple procedure
- EGD: Gastroesophageal junction (GEJ) nodularity with HGD on biopsy
- EMR pathology: IMA with HGD
- No endoscopic evidence of nodularity on repeat EGD with negative biopsies
- Follow up EGDs were done every 3 months with follow up EMR for GEJ subtle inflammatory changes with negative pathology



Nodularity at the GEJ



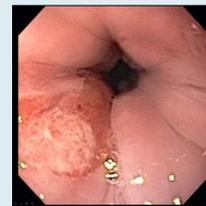
GEJ nodularity before EMR



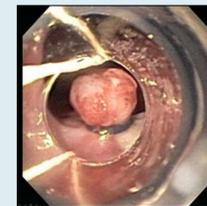
GEJ nodularity after EMR

### PATIENT 2:

- 75 year old female with a prior history of non-dysplastic BE
- Surveillance EGD showing HGD and IMA on biopsy
- EGD/EUS: Para-aortic lymph node (<1 cm) and esophageal nodularity treated with EMR
  - Pathology: BE with HGD, low-grade dysplasia (LGD), possible IMA, and negative lymph node FNA
- Repeat EGD: No evidence of nodularity; flat Barrett's treated with RFA
- Third EGD with mild GEJ irregularity biopsy: Non-dysplastic Barrett's
- RFA treatment on three separate occasions for short segment BE
- Subsequent EGD with GEJ biopsy: Free of pathology



Nodularity at the GEJ



EMR of esophageal nodularity



EUS with enlarged para-aortic lymph



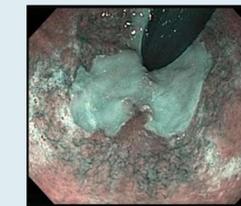
EUS-FNA of para-aortic lymph node



RFA treatment of BE

### PATIENT 3:

- 75 year old female with a history of reflux and gastritis
- EGD: Irregular Z-line and esophagitis
  - Pathology: Barrett's mucosa with HGD (unable to exclude IMA)
- Repeat EGD: GEJ nodularity treated with EMR at two sites
  - Pathology: IMA with invasion into the muscularis mucosae with negative deep margins
- Third EGD: No residual BE



Narrow band imaging showing an irregular GEJ with nodularity before EMR



GEJ nodularity after EMR

### Discussion

- BE is found in 4% of patients undergoing EGD
- BE has an estimated 20-fold increased risk of developing EAC
- Visible nodules with HGD suggest a more advanced lesion; EMR upstages the diagnosis to cancer in up to 40% of cases
- EMR/RFA is the standard of care for BE with HGD or IMA
- Female patients with esophageal HGD and/or IMA undergo EMR/RFA, but no data suggests their response is the same as male patients
- Further investigation of gender differences may reveal distinct incidence and response to EMR/RFA
- Such differences would affect prognostication, timing of surveillance, and treatment
- Our case opens a discussion to examine gender differences in esophageal HGD and IMA with further studies

### References:

1. Bennett, C., et al. "Consensus statements for management of Barrett's dysplasia and early-stage esophageal adenocarcinoma, based on a delphi process." *Gastroenterology*. 143.2 (2012): 336-346.
2. Bhat, Shivaram, et al. "Risk of malignant progression in Barrett's esophagus patients: results from a large population-based study." *Journal of the National Cancer Institute* 103.13 (2011): 1049-1057.
3. Spechler, Stuart J., and Rhonda F. Souza. "Barrett's Esophagus." *N Engl J Med* 371.9 (2014): 836-845.

© 2015 Lehigh Valley Health Network

A PASSION FOR BETTER MEDICINE.™

610-402-CARE LVHN.org