

Complications Related To Esophageal Stent (Boston Scientific [WallFlex] VS Merit Medical Endotek) Use in Benign and Malignant Esophageal Condition – A Single Center Retrospective Review.

Rajesh Essrani MD

Lehigh Valley Health Network, rajesh.essrani@lvhn.org

Hiral N. Shah MD

Lehigh Valley Health Network, hiral_n.shah@lvhn.org

Shashin Shah MD

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

Jennifer E. Macfarlan MPH

Lehigh Valley Health Network, jennifer_e.macfarlan@lvhn.org

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



Part of the [Gastroenterology Commons](#)

Let us know how access to this document benefits you

Published In/Presented At

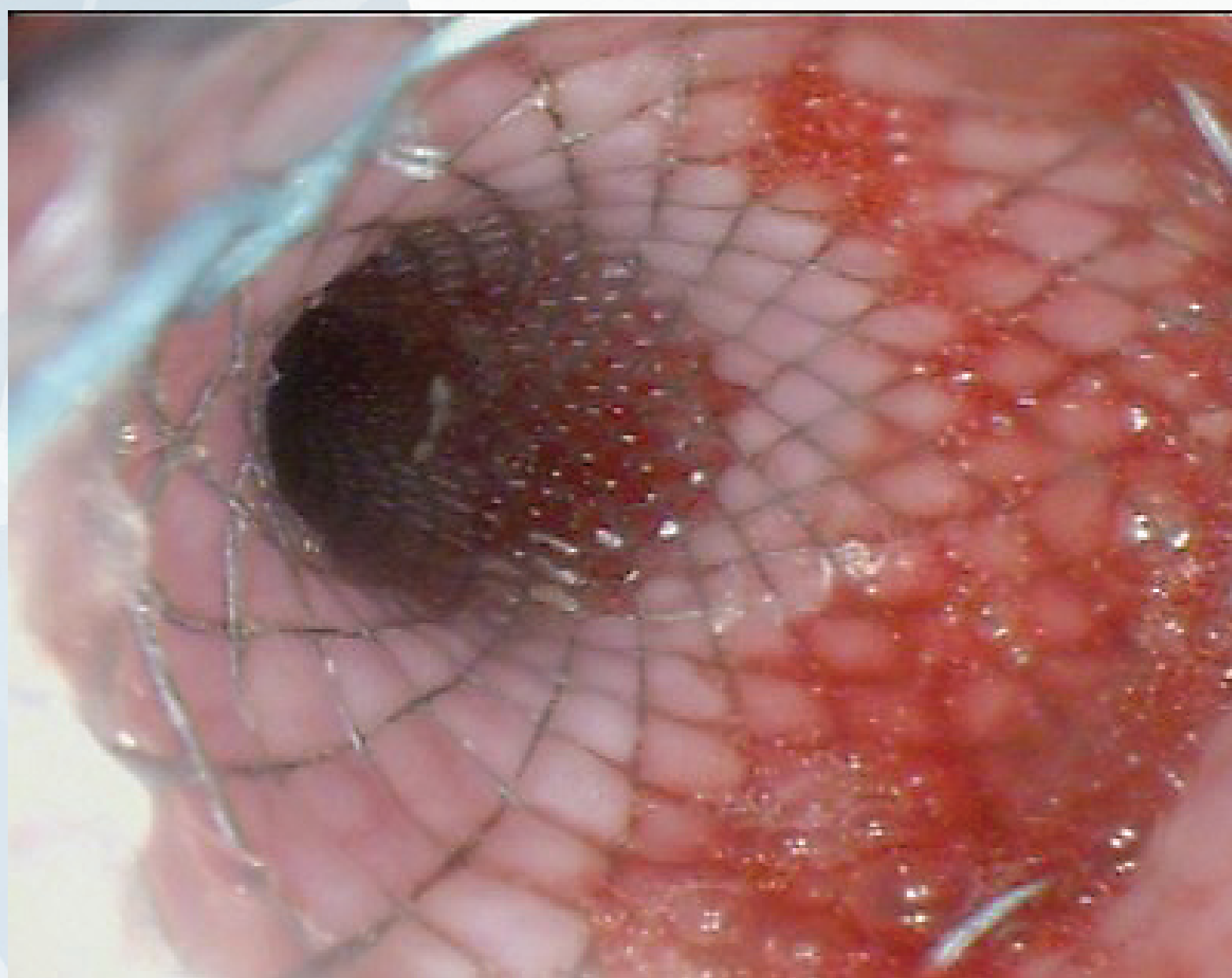
Essrani, R. Shah, H. Shah, S. Macfarlan, J. (2018, April). *Complications Related To Esophageal Stent (Boston Scientific [WallFlex] VS Merit Medical Endotek) Use in Benign and Malignant Esophageal Condition – A Single Center Retrospective Review*. Poster Presented at: LVHN- Resident Research Day, Allentown, PA.

Essrani, R. Shah, H. Shah, S. Macfarlan, J. (2018, June 3rd). *Complications Related To Esophageal Stent (Boston Scientific [WallFlex] VS Merit Medical Endotek) Use in Benign and Malignant Esophageal Condition – A Single Center Retrospective Review*. Poster Presented at: Digestive Disease Week, Washington, DC.

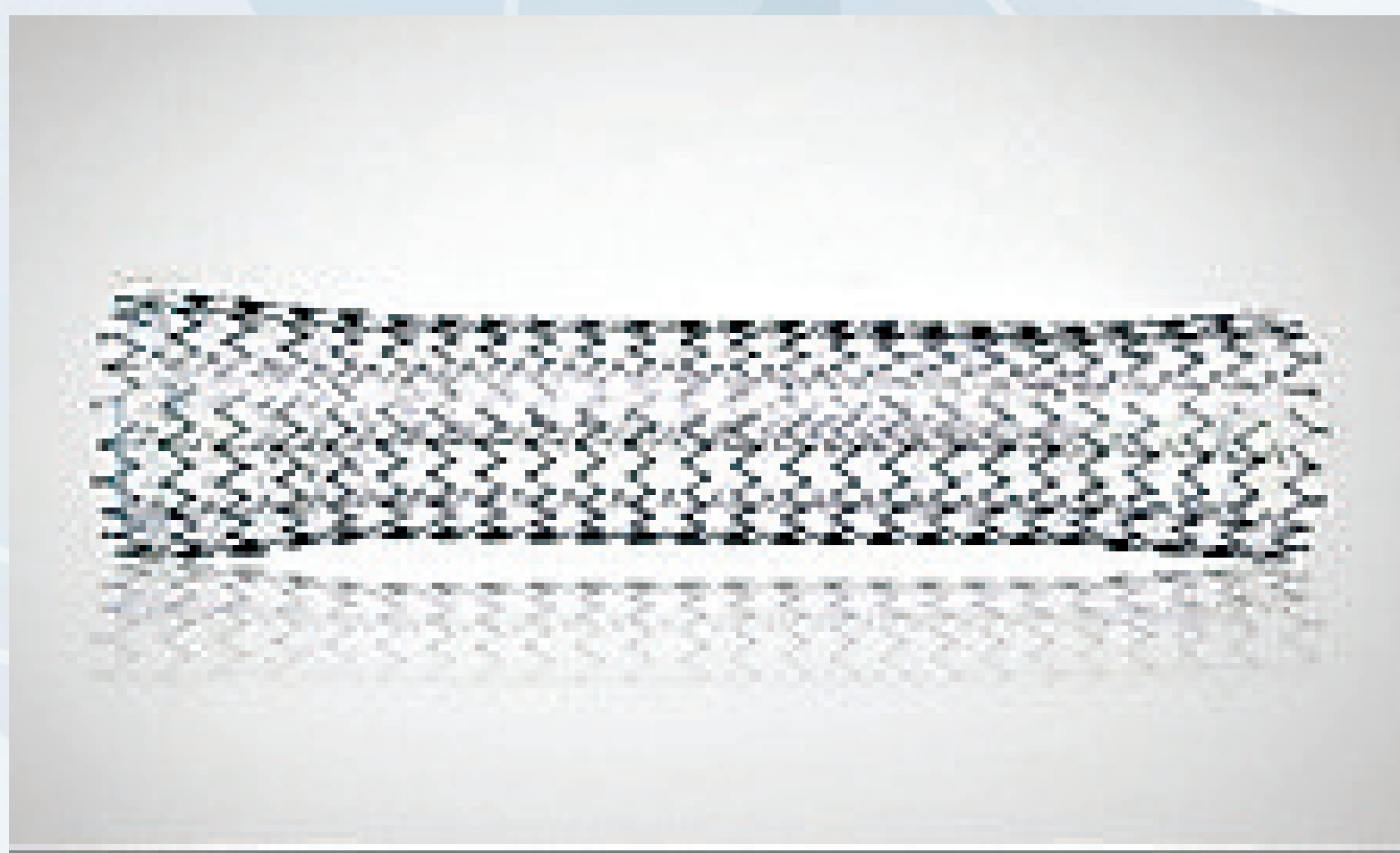
This Poster is brought to you for free and open access by LVHN Scholarly Works. It has been accepted for inclusion in LVHN Scholarly Works by an authorized administrator. For more information, please contact LibraryServices@lvhn.org.

Complications Related To Esophageal Stent (Boston Scientific [WallFlex] VS Merit Medical Endotek) Use in Benign and Malignant Esophageal Condition – A Single Center Retrospective Review

Rajesh Essrani, Hiral Shah, Shashin Shah, Jennifer Macfarlan • Lehigh Valley Health Network, Allentown, Pa.



WallFlex Esophageal Stent



Merit Medical Endotek

BACKGROUND

Esophageal stents can be used to treat benign esophageal disorders such as esophageal leaks, fistulas, refractory strictures and malignant conditions like locally unresectable or advanced metastatic cancer of the esophagus, those with poor functional status who can't tolerate surgery or chemo radiotherapy, or those in whom previous treatment failed or those with locally recurrent disease. There are various complications post stent placement like chest pain, bleeding and stent migration. These complications depend on a number of factors like indication of stent placement, diameter/length and design of the stent.

STUDY AIMS

This study focused on assessing Boston Scientific (WallFlex) VS Merit Medical Endotek complication rates in benign and malignant conditions.

METHOD

In this retrospective study, patients who underwent esophageal stent placement for benign and malignant esophageal conditions between January 1, 2006 and December 12, 2016 were selected. Charts were reviewed to capture gender, indication of stent placement, stent length/diameter, age of the patient at the time of stent placement, length of hospital stay, physician performing a procedure and complications within 90 days of stent placement. Descriptive statistics including means were reported with the standard deviation for the continuous variables along with frequencies and percentages for all categorical variables.

RESULT

67 patients (71.6% male) underwent stent placement (WallFlex 49.3% and Merit 50.8%) for malignant (68.7%) mainly esophageal obstruction by primary esophageal cancer (89.1%) and benign causes (31.3%) mainly esophageal leak (66.7%). Merit and WallFlex used in malignant conditions were 82.4% and 54.6%, respectively, and in benign conditions were 17.7% and 45.5%, respectively. Mean age at which endoscopy was performed 63.0 ± 11.8 years. Most common diameter used was 23mm (74.2%) and length used was 120mm (38.8%). Complications post Merit and WallFlex placement were 79.4% and 60.6%, respectively, with chest pain (67.7% and 48.5%) being the most common complaint followed by stent migration (29.4% and 18.2%) and bleeding (14.7% and 12.1%)

Complications with malignant and benign conditions were 73.9% and 61.9%, respectively (specific complication data in Figure 1).

Complications with 19, 18 and 23mm diameters were 75.0%, 66.7% and 69.4%, respectively. Complications with 120, 150, 100, 15, 12, 10mm stent lengths were 84.6%, 58.3%, 58.8%, 80.0%, 75.0% and 33.3%, respectively.

CONCLUSION

Our study showed that Merit stent was mainly used and major indication of stent placement was a malignant condition. Major complications were seen when the reason for stent placement was a malignant condition, diameter was 19mm, length was 120mm and use of Merit stent.

PERCENTAGE OF PATIENTS WHO EXPERIENCED EACH COMPLICATION BY STENT INDICATION

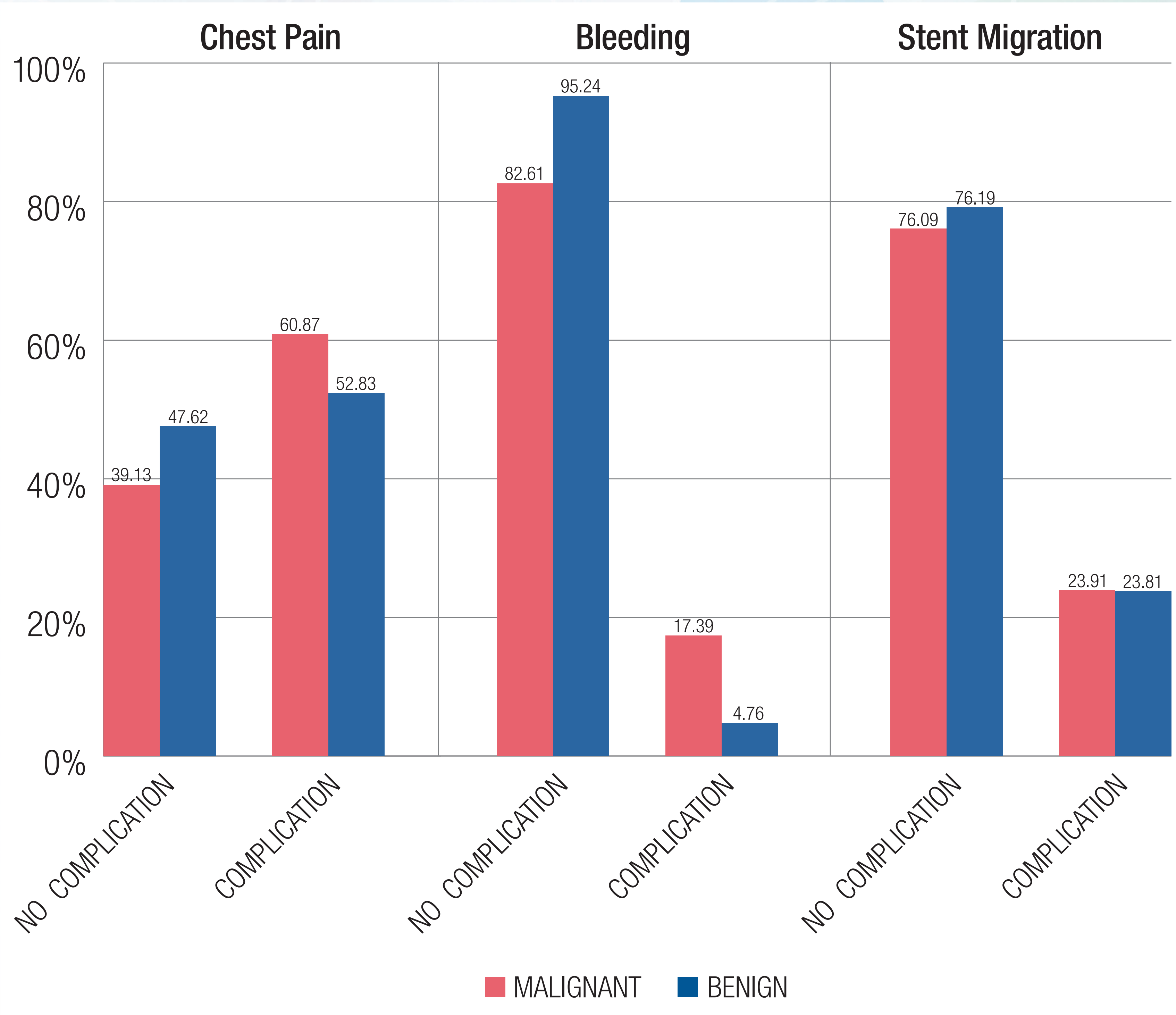


Figure 1