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](https://scholarlyworks.lvhn.org/medicine)

Part of the [Gastroenterology Commons](https://scholarlyworks.lvhn.org/medicine)

Published In/Presented At


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


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.