



Vascular Medicine

SEX DIFFERENCES IN THE USE OF INFERIOR VENA CAVA FILTERS IN PATIENTS WITH PROXIMAL LOWER EXTREMITY DEEP VEIN THROMBOSIS IN THE UNITED STATES

Poster Contributions
Poster Hall, Hall C
Friday, March 17, 2017, 3:45 p.m.-4:30 p.m.

Session Title: Venous Investigation: The Dark Side
Abstract Category: 39. Vascular Medicine: Endovascular Therapy
Presentation Number: 1168-360

Authors: *Vladimir Lakhter, Chad Zack, Satyajit Reddy, Saurav Chatterjee, Vikas Aggarwal, Deborah Crabbe, Riyaz Bashir, Temple University Hospital, Philadelphia, PA, USA, Mayo Clinic, Rochester, MN, USA*

Background: Utilization of inferior vena cava (IVC) filters in the setting of deep venous thrombosis (DVT) is common in the United States. Despite the widespread use of IVC filters, sex-based differences in utilization and outcomes are unknown.

Methods: Nationwide Inpatient Sample (NIS) database was used to identify all patients with a principal discharge diagnosis of proximal lower extremity (LE) or caval DVT who underwent IVC filter placement between January 2005 and December 2011. We evaluated the temporal trends and safety outcomes of IVC filter placement among men and women in the United States. Propensity scores were used to construct two matched groups (6,727 men and 6,727 women) for comparative analysis.

Results: Among 108,243 patients with proximal LE or caval DVT, 18,730 (17.3%) patients underwent IVC filter placement. Women were more likely to undergo an IVC filter placement compared to men (18.6% vs. 15.8%, $p < 0.01$, respectively). Utilization of IVC filters increased between 2005 and 2011 for both women (17.1% to 19.1%, $p < 0.01$) and men (13.8% to 15.8%, $p < 0.01$). Comparative outcomes analysis revealed higher rates of blood transfusions but lower rates of gastrointestinal bleeding in women compared to men (Table 1).

Conclusions: In this nationwide observational study we found that women had higher rates of IVC filter placement compared to men. Whereas women required more blood transfusions, they experienced lower rates of gastrointestinal bleeding than men.

Matched Sex-Based Outcomes in Patients Undergoing IVC Filter Placement			
	Male (n = 6,727)	Female (n = 6,727)	P value
Death (%)	1.6	1.5	0.58
Blood Transfusion (%)	12.8	16.0	< 0.01
Intracranial Hemorrhage (%)	0.7	0.6	0.53
Procedure Related Hemorrhage (%)	0.6	0.6	0.57
Gastrointestinal Bleeding (%)	5.3	3.9	< 0.01