

Planning, Placement, and Retrieval

Placement of inferior vena cava (IVC) filters remains one of the most common endovascular procedures. Surprisingly, utilization of these devices varies from country to country around the world, the highest per capita utilization being in the United States. The development of optional retrievable filters has added interest and increased the use of these devices, even though most of the devices are actually left for permanent use for a variety of reasons. This month's issue is dedicated to this important clinical tool.

First, Mark W. Burket, MD, details the available imaging modalities, careful measurement and sizing techniques, and keys to understanding nearby anatomy to ensure a successful procedure for IVC filter placement. Our IVC cover story continues with a review by John A. Kaufman, MD, on the current data for filter indications. Although the literature does not yet best reflect the current state, a long history of development as well as physician experience enable appropriate placement in carefully selected patients as our knowledge about these devices continues to expand.

Before you place an IVC filter, there are several steps that should be followed. Ulku Cenk Turba, MD; Saher S. Sabri, MD; Wael E.A. Saad, MD; Auh Whan Park, MD; John F. Angle, MD; and Alan H. Matsumoto, MD, review this process, from access to deployment, and then discuss handling problems such as misplacement, tilt, and migration.

Peter B. Brant-Zawadzki, MB, BCh; Mark R. Sarfati, MD; and Larry W. Kraiss, MD, take a look at why filter retrieval rates are so low, reminding us that it is the duty of the physician to explain the risks and benefits

to the receiving patient and ensure that filters are placed and retrieved appropriately. Bob Smouse, MD, and Amardeep Johar, MD, then discuss the indications and contraindications for IVC deployment and

examine how the market has changed over the years. They consider the current market leaders and what potential changes lay ahead.

Anthony C. Venbrux, MD; Grant J. Yanagi, MD; and Brian S. Martell, MS IV, share a complex and controversial case of permanent filter retrieval—something not recommended in the Instructions for Use. However, this case exhibits the biological processes of the IVC and shows that it is possible to remove even a permanent filter if the device is no longer needed or in fact places the patient at risk of

thrombosis. We have lastly included an up-to-date chart of the IVC filters available in the United States.

We also have several department articles this month to supplement our issue. The first is a case of complex aortoiliac aneurysm management from Bibombe P. Mwipatayi, MMed (Surg), FCS (SA), FRACS, and colleagues. They describe successful repair using synchronous fenestrated stent graft placement in a patient with particularly complicated anatomy. Joshua A. Beckman, MD, MS, asks whether the interventional community is doing enough to improve pulmonary embolism prevention, calling for us to continue to work in clinical trials to meet this need. Our issue closes with an interview with David L. Dawson, MD, who talks about simulation and the evolution of endovascular training, as well as how his time working with NASA molded the way he practices today.

I certainly hope you enjoy the timely and interesting articles presented in this month's issue. ■



Barry T. Katzen, MD, Chief Medical Editor