Major Complications After IVC Filter Placement & How To Avoid Them

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DISCLOSURES

No financial relationships to disclose
Will not be discussing nonapproved uses/techniques of devices or medications

Major Complications After IVC Filter Placement & How To Avoid Them

• Complications (minor and major)
• Renewed interest
• Techniques to avoid problems

Indications for IVC Filter Placement

• Low complication rate
• Relatively simple procedure
• High gain, low risk

Overlook Medical Center

• 400 Bed teaching hospital
• Active neurosurgery service
• 385 IVCF placed over 2 years

Indications for IVC Filter Placement & How To Avoid Them

Pre-Procedural

• Indications
  ✓ Hard
  ✓ Soft
  ✓ None

IVC Filter Placement Complications

Pre-Procedural

• Minor
  ✓ Arterial Puncture
  ✓ Contrast Reaction
  ✓ Bleeding
  ✓ Strut

• Major
  ✓ Vessel Perforation
  ✓ Maldeployment
  ✓ Embolization

Intra-Procedural

• Minor
  ✓ Strut fracture
  ✓ AV Perforation

• Major
  ✓ Strut embolization
  ✓ Cava thrombosis

Post-Procedural
Overlook Medical Center
SPECIALTY
VASCULAR
OTHER

Retroperitoneal Deployment
n=2

Retroperitoneal Deployment
n=2

Retroperitoneal Deployment
n=2

PULMONARY EMBOLIZATION
n=1
PULMONARY EMBOLIZATION

Techniques to Avoid Complications

- Avoid spinning device within sheath
- Twist entire delivery system (sheath + filter)
- Design improvements by Bard

Bard Device

- Old Delivery System
  - Allows for twisting of device within sheath
  - Crossing of limbs
  - Prevents expansion of legs
  - Allows for projectile embolization

Design Improvement

- 281 Bard filters placed
- 0 major complications

Renewed Interest in Complications

- Perforation of IVC
  - n=2
Renewed Interest in Complications

STEPS TO PREVENT COMPLICATIONS

• Pre-deployment venogram
• Avoid twisting shaft
• Keep axis parallel with IVC walls

STEPS TO PREVENT COMPLICATIONS

Read the label!

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