

OHVI RECOMMENDATIONS

Indications for IVC Filter Placement and Follow up

Primary Indications

Patients with documented PE/DVT

One more of the following:

- + Complication of AC
- + Contraindication to AC
- + Failure of AC
 - Recurrent PE/DVT despite adequate therapy.
 - Propagation of PE/DVT despite adequate therapy.
 - Inability to achieve adequate anticoagulation.

Consider serial surveillance duplexes instead of IVC filter for patients with calf vein/distal DVTs.

Relative Indications

Patients with documented PE/DVT

One more of the following:

- + Massive PE with residual DVT and patient unable to tolerate further PE due to example — limited cardiopulmonary reserve due to COPD, CHF etc.
- + Free-floating ilio-femoral or IVC DVT.
- + Pregnant patient with proven DVT during caesarean section or birth.
- + Temporary contraindication to anticoagulation such as elective surgery that is high risk for VTE (Ex – Orthopedic surgery/ Neuro-Spinal surgery, high risk bariatric surgery) and moderate to high risk for bleeding with anticoagulants.
- + Temporary complication of AC such as GI bleed, RP bleed etc.
- + Local fibrinolysis for DVT/ PE.

Patients without documented PE/DVT

- + Severe trauma with—closed head injury, spinal cord injury, multiple long bone or pelvic fractures.

No Indication

Patients with documented PE/DVT

- + Able to undergo anticoagulation.
- + Brief contraindication to anticoagulation in a patient who is low risk for bleeding with anticoagulation and surgery is low risk for VTE. (Ex— A young patient with situation DVT undergoing elective cholecystectomy and the surgeon is confident that the heparin can be stopped on-call to surgery and resumed few hours after the closure of incision).

Special Considerations

Supra Renal IVC Filter placement:

- + Presence of IVC thrombus up to the renal veins precluding infra-renal IVC filter placement.
- + Thrombus extending above previously placed infra-renal IVC filter
- + Gonadal/ Renal vein thrombus
- + During pregnancy
- + Anatomic variants
 - Duplication of IVC (can consider filter placements in both IVCs if size appropriate)
 - Anomalous distal insertion of renal veins
- + Intraabdominal or pelvic mass in patients who will undergo surgery and in whom operative IVC mobilization is contemplated
- + Intrinsic narrowing of the infra-renal IVC

Megacava

Consider bilateral iliac vein filters if possible with early retrieval plan vs. Bird's Nest filter.

Retrieval recommendations in these settings:

- + Plan for retrieval/ follow-up in 100% of patients without terminal medical condition.
- + Retrieve as soon as the contraindication to anticoagulation is resolved.

Filter Retrieval Recommendations:

- + **FDA:** "Get IVC filters out as soon as the risk outweighs the benefit."
- + Implanting physician is responsible for retrieval of the filter.
- + Retrieve as soon as the contraindication to anticoagulation is resolved.
- + Follow up and retrieval must be set up within 3 months.
- + Reasons for not retrieving the filter must be documented.
 - Situations for possible long term use:
 - Persistent contraindication to anticoagulation
 - High risk for VTE
 - Patient refused / PCP refused
 - Patient could not be contacted/ multiple unsuccessful attempts
 - Thrombus on the filter
 - Inability to retrieve the filter
 - Hypercoagulable patients being maintained on long term anticoagulation who may require future surgeries/AC interruptions
 - Patient death

**FOR QUESTIONS OR TO PROVIDE
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PLEASE NOTE:

- + *These guidelines are not intended for chronic DVT or PE.*
- + *Long term use of IVC filters increase the risk of DVT.*

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Glossary:

AC – Anticoagulation

COPD – Chronic obstructive pulmonary disease

CHF – congestive heart failure

DVT – Deep Vein Thrombosis

FDA – Food and Drug Administration

GI – Gastrointestinal

IVC – Inferior venacava

PE – Pulmonary Embolism

RP – Retroperitoneal

VTE – Venous thromboembolism

References

<http://www.fda.gov/MedicalDevices/Safety/AlertsandNotices/ucm396377.htm>

http://www.cirse.org/files/files/SOP/2009/SOP_CIRSE_2009_Percutaneous%20Inferior%20Vena%20Cava%20Filter%20Placement%20for%20the%20Prevention%20of%20Pulmonary%20Embolism.pdf

J Vasc Interv Radiol 2011; 22:1499–1506

Circulation 2005 Jul 19;112(3):416-22. Epub 2005 Jul 11.

J Vasc Surg 2003;37:523-7