

INTRODUCTION

- 54 year old female with prior history of a TrapEase (Cordis Endovascular, Santa Clara, California) inferior vena cava filter implanted in 2008 for deep venous thrombosis and pulmonary embolism following a hysterectomy.
- She initially presented with abdominal pain of uncertain etiology and filter tenting and erosion of side struts outside of the IVC.
- TrapEase filter removal was performed due to concern for symptomatic caval perforation by the filter.

METHODS

- General anesthesia
- Access: Right internal jugular and right common femoral 18Fr.
- Caudal and cranial filter apices were snared using a 15 mm gooseneck snare with glidewires, which were then externalized through the placed sheaths.
- A 308 nm xenon chloride excimer laser sheath (Spectranetics, Colorado Springs, Colorado) was then used from both access sites to free the filter attachments to the caval wall with a "kissing" dual sheath technique and to then extract the filter.

FIGURE 1

Inferior venacavogram demonstrating TrapEase IVC filter extend beyond the walls of the vena cava. No significant thrombus was noted within the filter itself

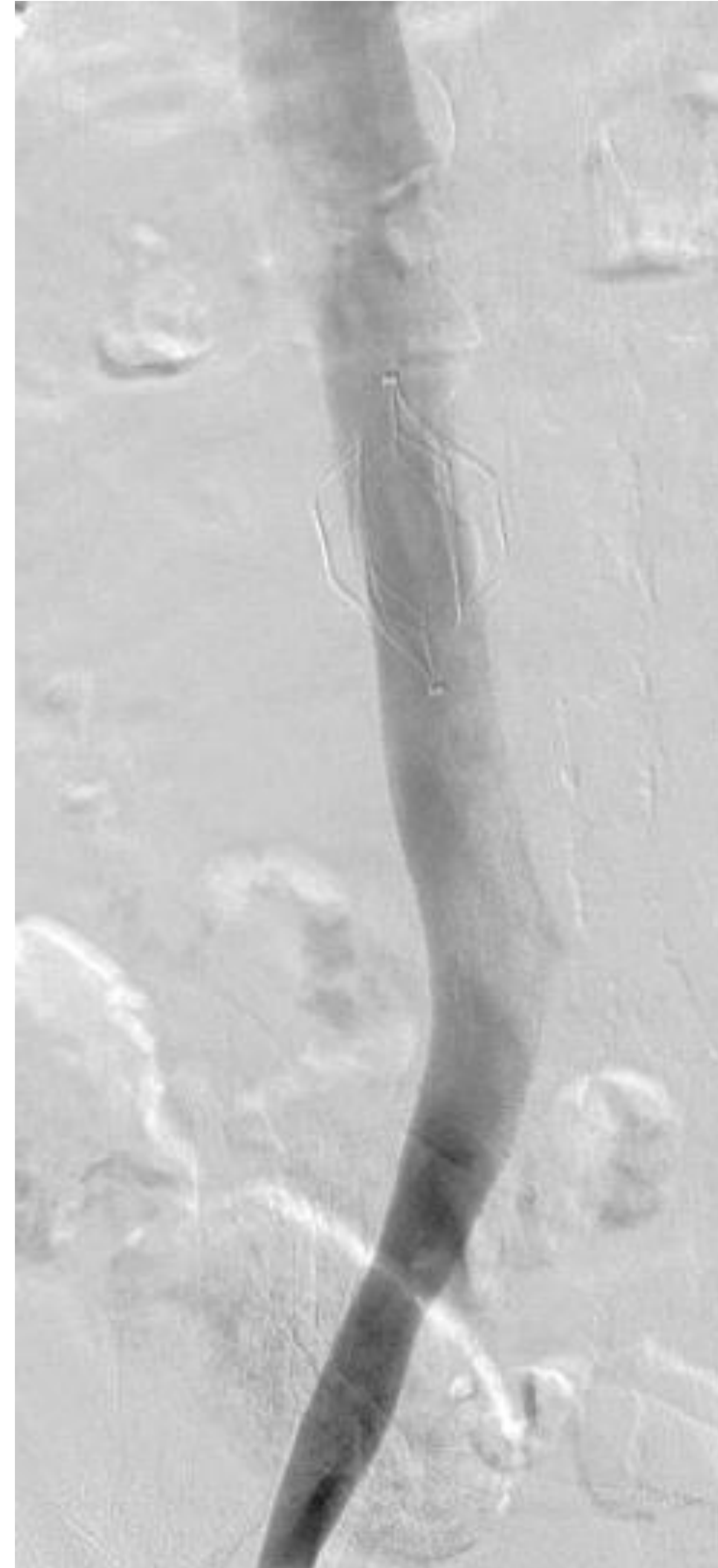


FIGURE 2

An excimer laser sheath (advanced from below in this figure) was utilized to free the filter attachments



FIGURE 3

Completion inferior venacavogram demonstrating slight narrowing and irregularity, but no evidence of extravasation



METHODS

- Hemostasis was achieved with manual pressure and 4-0 absorbable suture and the right neck and manual pressure in the right groin.
- Contrast load: 75 milliliters of Isovue
- Fluoroscopy Time: 18.4 minutes

RESULTS

- The procedure was technically successful without complication.
- Filter found to be intact without evidence of fractured parts.
- Completion venography demonstrated a residual fibrin sheath post-filter removal.
- The patient was continued on anticoagulation with rivaroxaban 20 milligrams daily.

CONCLUSIONS

- Retrieval of polyhedron design IVC filters is technically feasible with excimer-laser sheath assistance and filter engagement.