Summary of the Application of Aegisy Inferior Vena Cava Filter: 33 Cases

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Deep venous thrombosis (DVT) of lower limbs can cause acute pulmonary embolism (PE), even threaten life as serious. It is still controversial that whether to use an inferior vena cava filter (IVCF) and which kind of IVCF is used during DVT treatment. Our hospital totally used 33 Aegisy filters from September, 2005 to September, 2007 and reported as below.

Discussion

Aegisy filter is rhombus-shaped, made by Ni-Ti alloy cutting, rocker designed at the end, and connected to the delivery rod via rotary bolts. In clinical application, this filter can be recovered and withdrawn timely as the provisional filter after intravenous thrombus removal if it does not detach from the delivery tube after releasing in the vena cava; if it detaches after releasing, it can be retained in the vena cava as permanent or recoverable filter. On the basis of the application of provisional and permanent filters[4], we developed the application of OptEase recoverable filter and made a satisfactory effect in 2005[5]. Meanwhile, this group of Aegisy filters was applied in clinic and the feature of Aegisy filter used as permanent, provisional and recoverable filters was made full use. In this group, 2/33 cases were used as permanent filter; 8/31 cases used in the intravenous thrombus removal did not detach after release, of which 4 were recovered and withdrawn timely as provisional filter and 27 were recovered as recoverable filter at 12-14d after intravenous thrombus removal, with a recovery success rate of 85% (23/27). Aegisy filter has the provisional, permanent and recoverable application characteristics and its application mode can be selected according to different conditions, thus it shall have a good clinical application prospect.

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Clinical Application and Observation of Retrievable Aegisy Vena Cana Filter

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[Abstract] Objective To discuss the clinical application value of retrievable Aegisy vena cana filter in the prevention of pulmonary embolism (PE). **Methods** The filter was placed in via the healthy side femoral vein of 32 cases with acute or subacute deep vein thrombosis (DVT) and (or) PE; after drug or surgical treatment, it was observed whether there existed PE symptoms, whether the symptoms were aggravated, and if the change of the filter shape and filter location occurred. **Results** All the inferior vena cana filters were successfully emplaced, and DVT responded well to the filters; no clinical relevant pulmonary embolism occurred; the average time of filter emplacement was 14.0±2.0 days; thrombus was trapped in 24 cases (75%). **Conclusions** Retrievable vena cana filter is of exact curative effect in the prevention of PE and high value of clinical application.

[Keywords] pulmonary embolism; vena cana filter; venous thrombosis; clinical observation

Clinical Application of Aegisy Vena Caval Filter in Transcatheter Thrombolytic Therapy of Deep Venous Thrombosis of Lower Extremity via Jugular Vein Approach

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[Abstract] Objective To investigate the value of Aegisy vena cava filter in the deep vein thrombosis (DVT) by transcatheter thrombolytic therapy. **Methods** To prevent pulmonary artery embolism, 45 cases of deep venous thrombosis of lower limbs (left, n=36; right, n=6; left and right, n=3; PE, n=4) from April 2008 to August 2009 underwent plating of the Aegisy vena filter in Catheter-directed thrombolysis with urokinase. **Results** Forty-five Aegisy vena cava filters were implanted in 45 patients with lower extremity DVT. The technical success rate was 100%, without filter migration, filter tilting, filter fracture, IVC perforation, or IVC thrombotic obstruction, One case of PE died, and in the others no detectable PE or recurrent PE was observed in thrombolytic therapy. Thirty six of 45 filters were successfully removed out, with filter stayed in body for 7-18 days (average 9.5 days). In 9 filters with permanent retention, filter migration and thromboses were not detected during the follow-up of 2-17 months (average 9.7 months). **Conclusion** Planting of Aegisy vena cava filter is simple, controllable and safe via jugular vein approach. It is effective to prevent symptom pulmonary embolism in the process of thrombolytic therapy of the deep venous thrombosis of lower limbs.

[Keywords] Pulmonary embolism; vena cava filter; venous thrombosis; Catheter directed thrombolysis

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Clinical application of retrievable Aegisy vena cana filter in trauma patients

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[Abstract] Objective To explore the clinical application value of retrievable Aegisy vena cana filter in the prevention of pulmonary embolism (PE) in trauma patients. **Methods** The filter was placed in via the healthy side femoral vein of 108 cases with acute or deep vein thrombosis (DVT); after drug or surgical treatment, it was observed whether there existed PE symptoms, whether the symptoms were aggravated, and if the change of the filter shape and filter location occurred. **Results** All the inferior vena cana filters were successfully emplaced, and DVT responded well to the filters; no clinical relevant pulmonary embolism occurred; the average time of filter emplacement was 11.5 days; thrombus was trapped in 62 cases (57.4%). **Conclusions** Retrievable vena cana filter is safe and effective in the prevention of PE for trauma patients and have high value of clinical application.

[Keywords] Pulmonary embolism; Retrievable vena cana filter; Deep venous thrombosis