

中文題目：以經皮導管方式移除人工血管斷片- 單一醫院之十二年經驗

英文題目：Strategies to Reduce the Incidence of Dislodged Central Venous Port -Catheter – Lessons Learned from Percutaneous Retrieval of Dislodged Fragments: A Single-Center, 12-years' Experience

作者：劉京翰，吳宜穎，蔡宗能

服務單位：三軍總醫院內科

**Objectives:** This study aimed to investigate the efficacy and safety of percutaneous retrieval of dislodged central venous access fragments. Moreover, the impact on the incidence of dislodgement was evaluated after implementation of a new policy including a training course for all staff members, establishment of a dislodge report system, and shortening of the retention time of central venous port -catheters.

**Methods:** From September 2005 to September 2017, a total of 10,768 central venous port –catheters were implanted and 190 patients were referred for retrieval of fractured catheters. The characteristics of the dislodged central venous port -catheters and of the procedures were recorded. Baseline characteristics, distal embolization and retrieval procedure were compared before and after implementation of the new policy.

**Results:** The success rate of percutaneous retrieval of the dislodged fragment was 98.4% and the complication rate was 2.6%. Irrigation resistance to infusion was the most common presentation of catheter dislodgement, and the most common location for dislodged fragments was between the superior vena cava and right atrium. After implementation of a new integrated policy, the incidence of dislodgement declined from 3.9% to 0.6% ( $p<0.001$ ). Additionally, the percentage of dislodgement significantly decreased within 3 years after implantation ( $p=0.027$ ).

**Conclusion:** Percutaneous retrieval of a dislodged catheter is a safe and efficient method to remove the dislodged central venous port -catheter with a high rate of success. The occurrence of central venous port- catheter dislodgement can be reduced by providing a staff training course, establishing a reporting system, and shortening the retention time.

**Key words:** central venous port -catheter dislodgement, percutaneous transcatheter retrieval