

中文題目：針對肝硬化合併下肢深層靜脈血栓有使用抗凝劑禁忌症患者成功使用 TAPAS 導管溶栓世界首例報告

英文題目：**Targeted Adjustable Pharmaceutical Administration System (TAPAS) Catheter**

Assisted Thrombolysis in Cirrhotic Patient Contraindicated For Thrombolysis: First Case report

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Abstract

Background: For patient with deep vein thrombosis (DVT) who is contraindicated for anticoagulation therapy, we can just place inferior vena cava filter or just do nothing. Here we report a successful case using TAPAS catheter to deliver thrombolytic agent to treat DVT in a patient who is a case of liver cirrhosis, Child C with active GI bleeding

Case Report: A 82 y/o woman with a history of HCVD, DM, IHD, liver cirrhosis, HBV related, Child C (hypoalbuminemia, ascites, hepatic hydrothorax, hepatic encephalopathy, coagulopathy, splenomegaly with thrombocytopenia, EV), chronic renal insufficiency, and peptic ulcer was admitted due to right leg edema for several days. Lab showed D-dimer 2800 Plt 85000 INR 1.5-2.1, Cr 1.8 ammonia 182. Echo showed DVT over right proximal femoral vein. Heparin pump was given initially but later was held due to active GI bleeding event. We decided to perform PTA for this patient. A 8 Fr sheath was inserted to left common femoral vein and a retrievable G2X IVC filter was placed. The TAPAS catheter system consists of two low pressure compliant occlusion balloons. When inflated, the proximal and distal occlusions balloons isolate an area that defines the treatment zone. The distance between the balloons can be adjusted from 1.5 mm up to 300 mm, and match the desired length of the treatment zone. The drug can be aspirated following treatment. The TAPAS system is designed to allow targeted local drug delivery while minimizing systemic exposure. In this procedure, we set TAPAS over right common iliac vein and right femoral vein. Heparin 5000 units and Urokinase 480000 units was applied in the isolated target zone. Drugs were aspirated following treatment. Balloon dilatation and thrombus aspiration was also performed. Good venous flow was noted after procedure without bleeding events. Right leg edema resolved in one day.

Conclusion: For patients with a contra-indication for thrombolysis, a localized dose of Urokinase could be applied safely using the TAPAS catheter without bleeding complications.