



Extensive Bilateral Iliac Deep Vein Thrombosis After Brief Anticoagulation Interruption in May–Turner Syndrome

William Joel Machado, MD; Alinor Mezinord, MD

Introduction

May–Turner Syndrome (MTS): Left common iliac vein compression → left-sided DVT

High-risk anatomy: Chronic iliac stent, prior IVC filter, recurrent VTE

Standard DOAC interruption protocols assume average thrombotic risk; complex venous anatomy requires individualized planning

Case Description

Design: Single-patient case report

Patient: 64-year-old male with MTS, chronic left iliac stent, prior IVC filter, recurrent DVT/PE on long-term rivaroxaban

Trigger: Brief rivaroxaban interruption for minor procedure following recent apixaban ↔ rivaroxaban transitions

Diagnostics: Duplex ultrasonography and venography

Results

Presentation: Rapid bilateral leg swelling, gait instability, left foot drop, motor deficits

Imaging: Extensive bilateral iliac DVT with complete occlusion of left iliac stent

Management: Catheter-directed thrombolysis, mechanical thrombectomy, angioplasty, transition to INR-guided warfarin, intensive rehabilitation

Outcome: Restored venous patency, reduced edema; therapeutic INR and no recurrent thrombosis at 3 weeks

Clinical Challenge: Patients with **May–Turner syndrome** and complex venous anatomy are highly vulnerable to thrombosis during even brief interruptions of anticoagulation. **Venous stents** and prior **IVC filters** alter flow dynamic and amplify thrombotic risk. Without careful planning, **DOAC interruption** can create critical subtherapeutic windows.

Management Strategy: High-risk anatomy requires **precise peri-procedural anticoagulation planning**. Individualized DOAC transition protocols, early endovascular intervention, and close **multidisciplinary coordination** are critical to restoring venous patency and preventing irreversible limb morbidity.



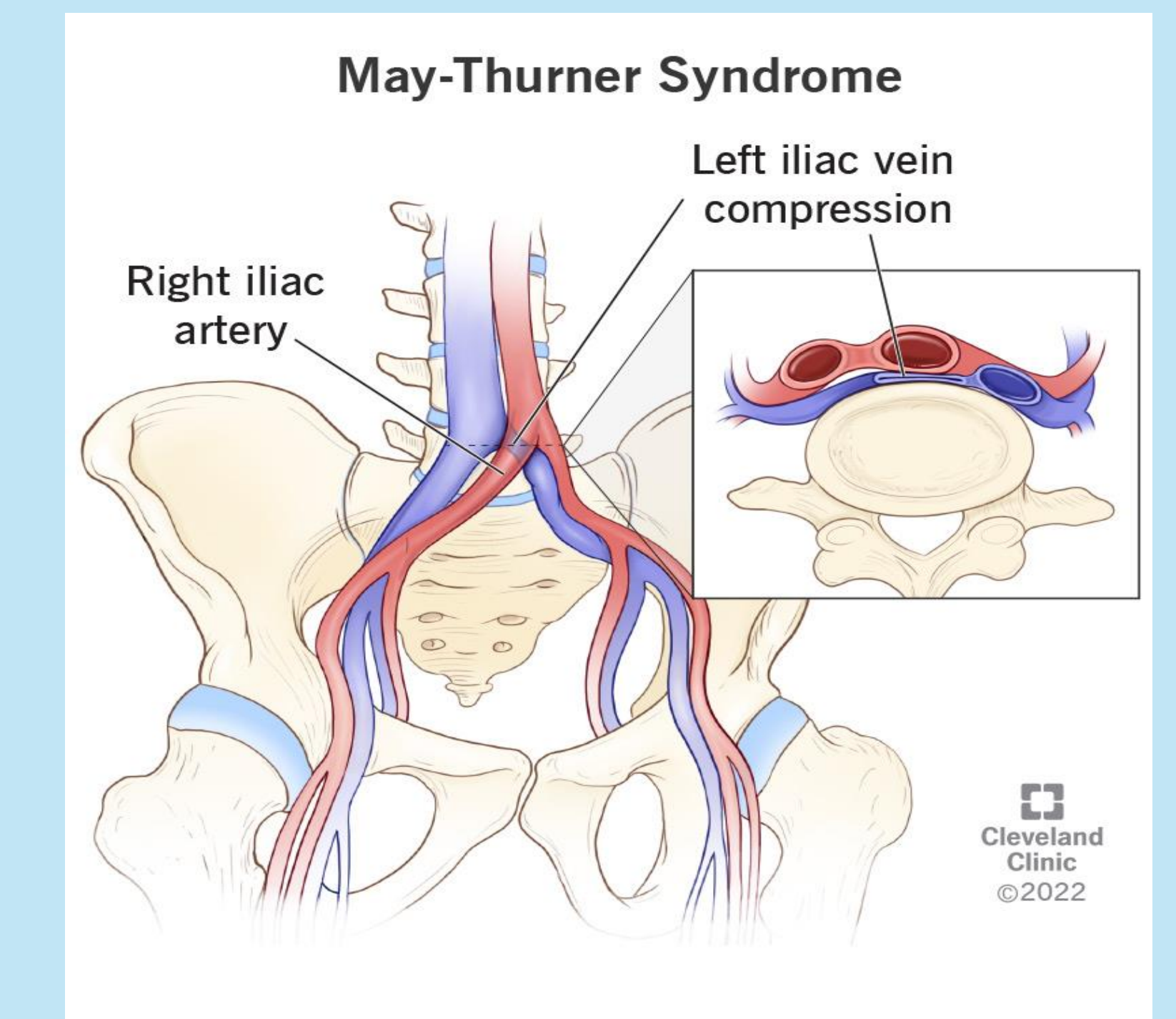
Scan for full case report and references

Clinical Implications

- Patients with **May–Turner Syndrome** and venous stents represent a uniquely high-risk population for thrombosis during anticoagulation interruption
- Standard peri-procedural algorithms for Direct Oral Anticoagulants may underestimate thrombosis risk in complex venous anatomy
- Even brief anticoagulation interruptions may create critical subtherapeutic windows
- These cases highlight the need for individualized peri-procedural anticoagulation strategies

Practice Pearls

- Identify high-risk venous anatomy before planning anticoagulation interruption
- Consider shorter interruption windows or bridging strategies when thrombosis risk is elevated
- Maintain **high suspicion for acute thrombosis** if symptoms develop after DOAC interruption
- Obtain early duplex ultrasound or venography when thrombosis is suspected



May-Thurner anatomy: compression of the left common iliac vein by the right common iliac artery