

May-Thurner Syndrome

Yonas Tamene*; Yasmin Rosshandler; Takele Demesilassie

Wellstar Kennestone Regional Medical Center; Marietta, United States.

*Corresponding author: Yonas Tamene.

Abstract

May-Thurner is a condition characterized by extrinsic venous compression by the arterial system against bone structures in the ileocecal region. MTS is also referred to as an ilio caval venous compression syndrome, iliac vein compression syndrome, Cockett's syndrome, and venous spur. The most common variant of MTS is due to compression of the left iliac vein between the overlying right common iliac artery and the fifth lumbar vertebrae, approach to diagnosis and treatment depends upon whether venous thrombosis is present.

Keywords: thurner syndrome, iliac vein, abdomen

Introduction

A 34-year-old woman was admitted to hospital for complain of left leg pain and swelling that is getting worse for the past 4 days. The pain started from her left groin to her left lower. The patient describes the pain as dull, constant it radiates to her lower abdomen and left groin. The pain intensity is 7/10. The pain gets better at rest, and it gets worse with ambulation. She has a recurrent history of deep vein thrombosis and the patient was on life-long therapy apixaban. 5mg bid, even on an anticoagulant, she developed deep vein thrombosis The patient denies any chest pain, fever, difficulty breathing. No relief with the use of NSAIDs at home.

Constitutional

She is not in acute distress

HENT: Normocephalic and Atraumatic Normal rate and regular rhythm. The pulmonary effort is normal, normal breath sounds Bowel sounds are normal, abdominal tenderness on left lower quadrants.

Musculoskeletal; Normal range of motion except some pain in left lower leg appears swollen, appears red, and feels warm to touch.

No focal deficit. A clinical diagnosis of May-Thurner syndrome was made.

CT abdomen: Compression of the iliac vein by the iliac artery demonstrated a near-completely occlusive thrombus extending from the left external iliac vein to the left common iliac vein with minimal central venous drainage into the IVC.

Pathophysiology

Chronic pulsation of the overriding right iliac artery leads to the development of a spur secondary to accumulation of elastin and collagen in the vein wall resulting in partial venous obstruction. Mechanical alterations of the vessel wall resulting in secondary of the obstruction, including extensive local intimal proliferation, venous thrombosis, and impaired venous return. Patients begin treatment in their symptomatic stage, despite most being asymptomatic for a long period. The disorder is prevalent after prolonged immobilization or pregnancy. Chronic pulsation of the overriding right iliac artery leads to developme3 clinical stages:

Stage 1: Iliac vein compression - symptoms may or may not be present.

Stage 2: Venous spur formation - fibrous shelves that develop in the vein, restricting blood flow and increasing disposition for deep vein thrombosis (DVT).

Stage 3: Deep vein thrombosis (DVT) - formation of a clot in the vein.

May-Thurner Syndrome is prevalent among patients with deep vein thrombosis (DVT)

It is presented in three clinical stages; asymptomatic iliac vein compression, development of venous spurs than the development of left iliac vein DVT.

Various diagnostic modalities are used due to the challenge of visualization of the iliac vein and spurs. Treatment aims at clearing the thrombus present, therefore preventing post-thrombotic syndrome. Correcting the compression of the left iliac vein. Surgical procedures are used to better condition with symptoms including venovenous bypass. Current

treatment includes catheter-directed thrombolysis, Anticoagulation treatment, and endovascular angioplasty and stenting are the permanent treatment modalities.

References

1. Harbin, M., & Lutsey, P. (2019). May-Thurner syndrome: History of understanding and need for defining population prevalence. *Journal Of Thrombosis and Haemostasis*, 18(3):534-542.
2. Heller, T., Teichert, C., Hafer, J., Weber, M., Kröger, J., et al. (2019). Prevalence of May-Thurner Syndrome in Patients with Deep Vein Thrombosis at a Large Medical Referral Center. *Röfo - Fortschritte Auf Dem Gebiet Der Röntgenstrahlen Und Der Bildgebenden Verfahren*, 191(12):1107-1117.

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