

May Thurner Syndrome Diagnosed Post Partum

Amy Ngov¹, Nagma Joarder¹, Sonal Karia¹

¹Department of Obstetrics & Gynaecology, Campbelltown Hospital, Sydney, NSW

Background

- May Thurner syndrome (MTS) refers to an anatomic phenomenon whereby extrinsic venous compression between the lumbar vertebrae and arterial system causes venous insufficiency and increased risk of thrombosis [1].
- Exaggerated lordosis, and compression from a gravid uterus may exacerbate subtle May Thurner anatomy in pregnancy. Furthermore, the hypercoagulable state of pregnancy and increased risk of deep venous thrombosis may disclose undiagnosed or asymptomatic MTS for the first time by aggravating the subtle obstruction to be clinically severe [2].

Aims

- We report a case of MTS first diagnosed post-partum and the multidisciplinary input required.

Case

- A 34-year-old G3P3 patient presented 11 days post elective caesarean section with left leg swelling, pain and discolouration.
- She had received prophylactic enoxaparin for 7 days post-surgery.

Results

- Her lower limb doppler revealed extensive thrombus within the femoral vein of the mid-thigh with extension to the left common iliac vein.
- CT venogram revealed evidence of the thrombosis occurring secondary to severe compression of the left common iliac vein due to its passage between the left common iliac artery and lumbar vertebrae, allowing for a diagnosis of MTS.
- She was managed with multi-disciplinary team involvement including obstetrics, haematology and vascular surgery.
- She was commenced on therapeutic enoxaparin, and switched to apixaban after ceasing breastfeeding.
- She is being reviewed in the community by the obstetrics and haematology team to monitor anticoagulation use, and by vascular surgery for consideration of stenting to correct the underlying compression.

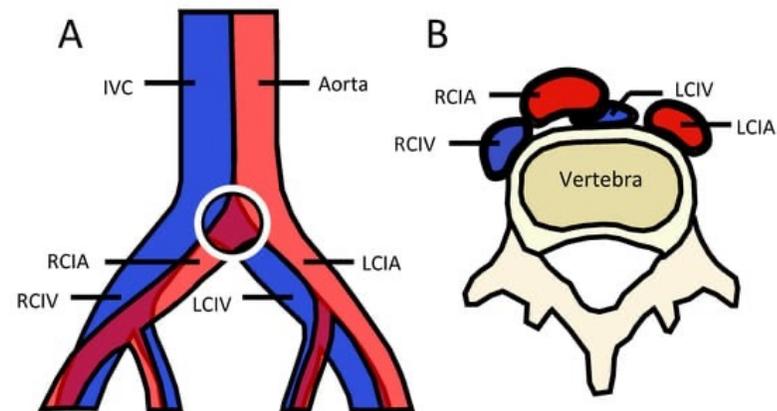


Figure 2. May Thurner Anatomy [1]

Coronal and transverse illustrations demonstrating compression of the left common iliac vein (LCIV) by the right common iliac artery. This is the most common form of May Thurner Anatomy.

Discussion

- Treatment for venous thromboembolism includes anticoagulation use with options available that are considered safe for use in pregnancy and/or breastfeeding.
- Endovascular therapy has become the standard of care for non-pregnant MTS patients, owing to significant reduction in long term complications when compared to anticoagulation alone. These procedures have been performed for both pregnant and postpartum patients [1]. Methods to limit radiation exposure to the fetus can include intravenous ultrasound and low dose fluoroscopy [3]. Thus, it is an option that can be considered, however further studies are required to assess long term follow up [1].
- MTS should be a considered differential for pregnant patients with oedema localised to the left lower limb. With appropriate anticoagulation therapy and close monitoring by a multidisciplinary team, pregnant and postpartum patients with MTS can be safely managed.

References

- [1] Schrufer-Poland, T. L., Florio, K., Grodzinsky, A., Borsa, J. J., & Schmidt, L. (2022). Management of may Thurner syndrome in pregnant patients. *Journal of Cardiovascular Development and Disease*, 9(12), 410. doi:10.3390/jcdd9120410
- [2] Trairisilp, K., Manopunya, M., Srisuwan, T., Chankhunaphas, W., & Tongsong, T. (2021). May-thurner syndrome is aggravated by pregnancy. *Medicina*, 57(3), 222. doi:10.3390/medicina57030222
- [3] Siah, T. H., & Chapman, A. (2018). Should catheter-directed thrombolysis be the standard of care for pregnancy-related iliofemoral deep vein thrombosis? *BMJ Case Reports*. doi:10.1136/bcr-2017-223105