



Successful management of a high risk VTE case in pregnancy

Urmee Jahan (Specialty Trainee year 4) & Ms. Mahnaz Akunjee (Consultant)

Objectives

Risk of VTE in pregnancy is 1-2 in 1000 [1]. Risk of subsequent PE after DVT is rarer. [2]
The patient developed PE after being on treatment of DVT and the report encloses the successful management.

Case Report

- 26+3/40: Patient was a 22-year old primiparous, low risk VTE scoring at booking (Smokes 4 cigarettes per day). She presented to A&E with lower back, supra pubic and loin-to-groin pain. UTI management was commenced based on her symptoms. The next day, patient returned with left groin, thigh, back pain with part of her left leg turning purple and pain feeling like "sore bones".
- Treatment dose of 15'000 units dalteparin was initiated whilst awaiting imaging. US doppler showed extensive thrombus on left iliac vein spreading to popliteal vein.
- 27+1/40: Whilst being an inpatient, she had developed shortness of breath. dalteparin dose increased to 10'000 Units am and 7500 units pm. ABG had type 1 respiratory failure pH of 7.41 with pO2 7.1 pCO2 4.7. sPO2 was 98%. MDT discussion included haematology and vascular team. Haematology suggested for no V/Q scan right then because of normal findings on chest X ray and ECG. Vascular team suggested not for IVC filter. Patient had Covid in the interim with mild symptoms.
- 34/40: Patient was diagnosed with PE on V/Q scan after worsening shortness of breath. dalteparin increased to 10'000 units am and 12'500 units pm.
- 36/40: Plan for induction of labour was made after the 36-week growth scan showed estimated fetal weight lower than the 3rd centile with redistribution.
- Due to unfavourable cervix for 48 hours and a window period of 48 hours without treatment dose of dalteparin, patient was offered caesarean section in balance of worsening doppler with growth retardation and less likelihood of achieving vaginal delivery.
- Uncomplicated category 3 emergency caesarean section was conducted and measured blood loss was 487 ml.
- Post op recovery: 2x admissions in two weeks due to superficial bleeding and was successfully discharged with follow up care taken up by haematology team.

Discussion

- Patient was a smoker but low risk for VTE on booking and presented with atypical symptoms of DVT.
- Although being on treatment dose of dalteparin, causes for DVT could be due to continuing to smoke along with affected by Covid. [3]
- Decision for IOL was in balance of high risk of bleeding along with worsening fetal doppler.

Conclusion

Balancing the time to deliver patient with PE,DVT and IUGR fetus whilst keeping it as much safe as possible for the mother and baby.

Take Home Message

- Successful management:
- Unusual presentation of VTE in pregnancy which can be misdiagnosed as UTI
 - Importance of MDT: haematology, radiology and vascular team
 - Timely decision to deliver in balance of risk vs benefits

References:
[1] Lim W, Eikelboom JW, Ginsberg JS; Inherited thrombophilia and pregnancy associated venous thromboembolism. BMJ. 2007 Jun 23334(7607):1318-21.
[2] de Moreuil C, Tromeur C, Daoudal A, Trémouilhac C, Merviel P, Anouilh F, Le Mao R, Hoffman C, Guegan M, Poulhazan E, Gourhant L, Lemarié C, Couturaud F, Le Moigne E. Risk factors for recurrence during a pregnancy following a first venous thromboembolism: A French observational study. J Thromb Haemost. 2022 Apr;20(4):909-918. doi: 10.1111/jth.15639. Epub 2022 Jan 24. PMID: 35020974.
[3] Alonso-Beato R, Lago-Rodríguez MO, López-Rubio M, Gómez-Tórtola A, García-Fernández-Bravo I, Oblitas CM, Galeano-Valle F, Demelo-Rodríguez P. Risk of thrombosis recurrence among patients with COVID-19 and surgery-associated venous thromboembolism. Rev Clin Esp (Barc). 2023 May;223(5):255-261. doi: 10.1016/j.rceng.2023.03.003. Epub 2023 Mar 27. PMID: 36990384; PMCID: PMC10043968.