



Pulmonary embolism in a parturient: A diagnostic and management dilemma

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Case

A 34 year old pregnant (G8P6) Asian woman at 33 weeks, presented to the hospital with vaginal bleeding and spontaneous rupture of membranes. She reported of having central chest pain and shortness of breath. Clinically, she was tachycardic but hemodynamically stable with normal oxygen saturation. Her ECG was unremarkable with no ischaemic changes and negative Troponin levels. On examination, she was found to have a transverse lie and cord presentation. A drop in her Hb was noted from 97 g/dl to 83 g/dl.

Background

BMI 34, Systolic cardiac arrest in 2011 with Permanent Pacemaker in situ, Type 2 Diabetes Mellitus (poorly controlled), Epilepsy (frequent seizures despite being on dual anti epileptics), 2 cerebrovascular accidents leading to old cerebral areas of infarcts, Asthma, Pre-eclampsia, 2 Caesarean sections in the past.

Management

A diagnosis of pulmonary embolism was suspected. In order to consider therapeutic anti coagulation, she would warrant management of ongoing antepartum haemorrhage. A Multidisciplinary decision involving Intensive Care, Medicine, Anaesthetics, Obstetrics, Cardiology and Neonatal team was taken to proceed with emergency LSCS with post operative HDU management. Patient underwent LSCS under spinal anaesthesia. Intraoperatively, placental abruption was confirmed. Baby was transferred to neonatal unit for further care. She later underwent CTPA following LSCS and a diagnosis of sub-segmental PE in left lower lobe was confirmed for which she was treated with therapeutic anticoagulants for 6 weeks.



Discussion

Thrombosis and thromboembolism remains one of the leading cause of direct maternal death during or up to six weeks after the end of pregnancy according to MBRACE-UK report 2022.

Pulmonary embolism in the presence of multiple long term conditions can be difficult to diagnose and manage during pregnancy. This requires good team work and early involvement of critical care.



This woman's care is an excellent example of multidisciplinary involvement with appropriate planning and management at a district general hospital.

References:

1. Knight M, Bunch K, Tuffnell D, Shakespeare J, Kotnis R, Kenyon S, Kurinczuk JJ (Eds.) on behalf of MBRRACE-UK.18 Dec 2020
2. Sheen JJ, Haramati LB, Natenzon A, Ma H, Tropper P, Bader AS, et al.. Performance of low-dose perfusion scintigraphy and CT pulmonary angiography for pulmonary embolism in pregnancy. Chest. (2018) 153:152–60. 10.1016/j.chest.2017.08.005