

# Management of a rare cause of maternal hypoxia guided by bedside ultrasound: A Case Report

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## Case

A 22 year old ASA 1 patient underwent uneventful elective caesarean section under spinal anaesthesia. Post-operatively she developed uterine atony and PV bleeding resulting in hypotension, anaemia and hypofibrinogenaemia (BP-84/54,Hb-54g/l,Fib-0.55g/l). The haemorrhage resolved following pharmacological treatment with an estimated blood loss of 3800ml. Transfusion of 4 units of packed red cells, 4 units of FFP and 2 units of cryoprecipitate achieved haemodynamic stability.

Shortly after cryoprecipitate transfusion, she developed respiratory distress, agitation, hypertension (BP 180/110) and cyanosis with SpO<sub>2</sub> <70% on air. Arterial blood gas sampling confirmed respiratory failure despite high flow oxygen (pO<sub>2</sub>-7.5,pCO<sub>2</sub>-6.3,H<sup>+</sup>-44.7).

Several diagnoses were considered but a combination of clinical findings, B-lines seen on lung ultrasound and the absence of R heart strain on echocardiography led to a working diagnosis of pulmonary oedema which initially responded to diuretic/vasodilator/CPAP treatment. Chest X-ray imaging subsequently confirmed the ultrasound findings but was not immediately available due to the remotely sited labour ward.

She was transferred to ICU where she was intubated and ventilated. She was difficult to oxygenate with florid bilateral pulmonary infiltrates on CXR (figure 1). After 24 hours her oxygenation improved rapidly and she was successfully extubated. Discussion with Haematology led to a presumptive diagnosis of transfusion related acute lung injury (TRALI). Full serological investigation is ongoing.

## Discussion

This case illustrates a rare complication of transfusion, a therapy often administered on the labour ward<sup>1</sup>. The immediate accessibility of bedside ultrasound equipment meant that several differentials could be rapidly excluded and targeted supportive therapy commenced.

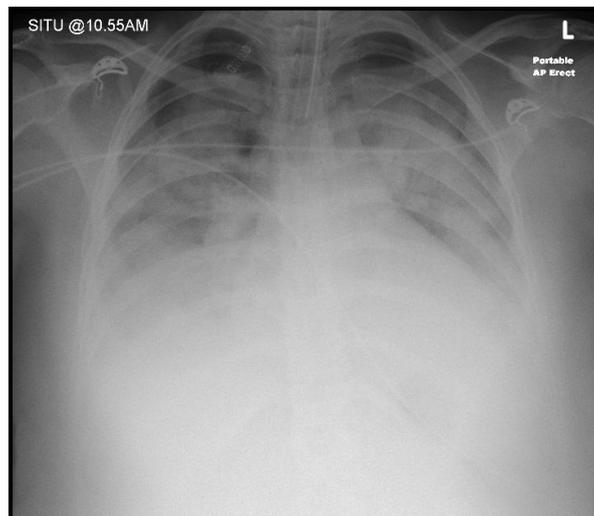


Figure 1.

## References:

1. PHB Bolton-Maggs (Ed), D Poles, A Watt and D Thomas on behalf of the Serious Hazards of Transfusion (SHOT) Steering Group. The 2013 Annual SHOT Report (2014) available at: <http://www.shotuk.org/shot-reports/>

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