

Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active. 14.8 s, APPT 46.7 s, fibrinogen 0.34 g/L, EXTEM CT/A5 272 s/9 mm, FIBTEM A5 undetectable. She was treated with a total of 9 g fibrinogen concentrate, 4 units FFP and 2 units platelets. SARS-Cov-2 infection was later confirmed.

Case 2: A 24-year-old primigravida with diabetes mellitus presented with reduced fetal movements at 30 weeks. She had confirmed SARS-CoV-2 infection with ongoing cough and fever. Emergency caesarean delivery was required for a pathological CTG. Admission bloods showed derangement: Platelets 120×10^9 /L, PT 11.1 s, APTT 75.5 s, fibrinogen 0.82 g/L, EXTEM CT/A5 79 s/39 mm, FIBTEM A5 6 mm. After treatment with 9 g fibrinogen concentrate, caesarean delivery was carried out under general anaesthetic. Intraoperative blood loss was less than 500 mL in both cases. Both had an uneventful recovery.

Discussion: These two cases of significant coagulopathy occurred in parturients with mild COVID-19 infection and no other potential causative diagnoses. CAC is usually regarded as a thrombogenic syndrome arising from severe infection. Early data [2] provisionally reported that pregnant CAC cases were rare, with prolonged PT/APTT, thrombocytopenia and raised D-dimer as key features. Our cases, however, had significant hypofibrinogenemia and occurred alongside mild infection. This has significant implications as decisions about safety of neuraxial block may be required rapidly, when SARS-CoV-2 status or blood results are unknown. The alternative of general anaesthesia also carries increased risk. Our unit has since adopted a requirement for FBC, clotting screen and fibrinogen on admission if suspicion of or proven COVID-19, although this is not covered by national guidance at present.

References

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P.83 COL4A1 mutation - the new kid on the block

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Introduction: The COL4A1 mutation first reported in 2005 is located on chromosome 13 and encodes for the alpha-1 chain of type VI collagen [1]. Defects in this gene cause weakness in the vascular basement membrane which can result in lacunar stroke and cerebral haemorrhage [2]. We report the case of a parturient with a COL4A1 mutation that underwent a spinal anaesthesia for a caesarean section (CS).

Case Report: A 35-year-old G2P1 with a somatic mosaic for COL4A1 mutation required an emergency CS due to a fast advancing labour (8 cm dilated at time of decision for surgery). The patient was seen in the obstetric antenatal clinic and advised against labouring due to the associated haemodynamic changes and increased risk of intracerebral bleeding. The patient was not seen in the anaesthetic clinic and unknown to our services. Obstetric history included a CS over ten years ago under a neuraxial block. Her COL4A1 mutation was not known at that time and was only investigated due to congenital defects noted in her first child. Our patient was unique in that she was the first person ever to be identified as having a somatic mosaicism for the mutation

and at the time of presentation showed no overt symptoms. Her other past medical history was unremarkable. Spinal anaesthesia was performed. A 25G spinal needle was inserted at the L4-5 interspace on first attempt. Hyperbaric bupivacaine 12.5 mg and diamorphine 400 μ g gave a cold sensory block to T3. Her blood pressure was titrated using a phenylephrine infusion with her systolic readings staying between 120 and 140 mmHg throughout. There was minimal blood loss and the patient made an uneventful recovery.

Discussion: The major concern in this disorder is the fragility of the vascular basement membrane resulting in intracerebral bleeding, thus the primary anaesthetic target should be prevention of hypertension. It was our view that a spinal anaesthesia would offer the safest haemodynamic control balanced against the unknown risk of neuraxial haematoma in this condition. The COL4A1 mutation is a relatively new discovery with limited case reports and none to our knowledge being published in reference to the obstetric population. Our patient, although the first to be identified with a somatic mosaicism, will not be the last as more women of child bearing age will be picked up incidentally through genetic screening. Our case report highlights that a spinal anaesthesia can be carried out safely in this condition when careful attention is paid to ensuring haemo-dynamic stability.

References

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P.84 Phaeochromocytoma: a rare cause of hypertension in pregnancy

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Introduction: Undiagnosed phaeochromocytoma, although a rare cause of hypertension in pregnancy, is associated with significant morbidity and mortality if missed [1]. This case report highlights the diagnosis and subsequent clinical management at our tertiary obstetric unit.

Case Report: A 34-year-old G4P1, presented at 33 weeks gestation with incidental severe hypertension at routine antenatal review. Gestational diabetes in her previous pregnancy was controlled with metformin but required insulin therapy in this pregnancy. She was admitted and commenced on labetalol and then nifedipine as per local guidelines, but remained hypertensive despite maximal therapy. Preeclampsia tests protein-creatinine ratio and placental growth factor were negative, so a renal ultrasound scan was performed. This showed a retroperitoneal lesion, with MRI confirming an adrenal mass. Normetadrenaline levels were 16 times greater than normal confirming phaeochromocytoma. Doxazosin was started, labetalol weaned and the patient transferred to our centre. There was a significant reduction in insulin requirements, felt to be an effect of alpha and beta blockade, though triggering a review for signs of placental failure. The MDT decision was to proceed with elective caesarean section at 37 weeks. Blood pressure was controlled with doxazosin, bisoprolol and nifedipine. After arterial line insertion, single shot spinal anaesthesia produced adequate anaesthesia, after attempted CSE was complicated by dural puncture. Blood pressure was maintained with a metaraminol