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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 $120 \times 10^9/L$, 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.

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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 µg 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 haemodynamic stability.

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

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Introduction: Undiagnosed pheochromocytoma, 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. Pre-eclampsia 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 pheochromocytoma. 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

infusion. Elective forceps use at delivery aimed to avoid tumour compression by fundal pressure. The patient remained hypertensive post-delivery until switched from doxazosin to phenoxybenzamine. PDPH required an epidural blood patch. Laparoscopic adrenalectomy was performed nine weeks postpartum, with histology confirming pheochromocytoma.

Discussion: Pheochromocytoma is an important differential in atypical severe hypertension in pregnancy. Misdiagnosis as pre-eclampsia can easily occur with disastrous results; with deaths featuring in MBRRACE reports [1]. Doxazosin has a lower foeto-maternal ratio than phenoxybenzamine so may be the preferred option for alpha blockade in pregnancy [2]. Anaesthetic considerations include hypertensive crises from catecholamine release and alpha/beta blockade producing resistance to vasopressors with potential for uncontrolled hypotension in response to regional anaesthesia.

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P.85 Severe SARS-CoV-2 in pregnancy

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Introduction: Pregnant women appear no more or less likely to contract SARS-CoV-2 infection than the non-pregnant population [1]. However, similar to other viral illnesses, they are at increased risk of developing severe disease, particularly in the third trimester of pregnancy. With patient consent we describe a case of severe SARS-CoV-2 in pregnancy, resulting in respiratory failure associated with a protracted and tumultuous intensive care (ICU) admission.

Case Report: A 30-year-old primigravida (non-smoker, booking BMI 50 kg/m²) presented at 32 weeks gestation with cough, fever and tachycardia. A viral PCR swab was positive for SARS-CoV-2. She received supportive therapy and steroids. On day 4 (D4), an MDT decision was made to deliver due to increasing oxygen requirement. A caesarean section under spinal anaesthesia was uneventful. Despite initial post-op improvement, she deteriorated further with increasing oxygen requirements and was transferred to ICU. She received remdesivir. Unfortunately, her condition worsened and she was intubated on D6. Her ICU course was complex and protracted and included: failed trial of extubation on D28, cardiac arrest on D29 while in the prone position, bacterial pneumonia, pulmonary embolism, kidney injury and filtration, Clostridium difficile infection, critical care neuropathy, venous thromboembolism, pulmonary hypertension (RV pressures 55–60 mmHg, dilated right ventricle with reduced systolic function) and low mood. Her case was discussed with the local ECMO unit but she did not meet criteria for transfer. She underwent a surgical tracheostomy on D45. After a prolonged respiratory wean, she was eventually decannulated on D96 and stepped down to a medical ward on D101. She was discharged for rehabilitation on D113 and discharged home on D139. A year from the initial presentation, she has returned to her pre-morbid activity level.

Discussion: The MBRRACE-UK rapid COVID-19 report found that 10% of pregnant patients admitted to hospital with symptoms of SARS-CoV-2 were admitted to ICU, and 0.4% died [2]. Despite receiving treatment strategies available at the time of her illness, our patient suffered multiple complications of COVID-19. Since the start of the pandemic, there have been significant advances in treatment strategies for COVID-19. Pregnant women must receive the same therapeutic interventions as non-pregnant to minimise the risk of severe complicated infection. The RCOG recommends that all women should be offered vaccination.

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P.86 Arachnoiditis following epidural blood patch

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Introduction: Epidural blood patch (EBP) is a common and effective treatment for post-dural puncture headache (PDPH) in obstetrics and is recommended in UK national guidelines [1]. Serious neurological complications following EBP are rare and not well understood. We report a further case of arachnoiditis in a patient having undergone EBP for PDPH following epidural analgesia for labour.

Case Report: A nulliparous 40-year-old woman attended Delivery Suite for induction of labour. She requested epidural analgesia which was sited by a senior anaesthetist around midday. Insertion was difficult, requiring attempts at two different spinal levels. Analgesia was inadequate and the epidural needed re-siting a few hours later. Five days post-delivery, the patient presented to the maternity assessment unit with symptoms consistent with low pressure headache. An epidural blood patch was successfully and uneventfully performed that same day by two consultant anaesthetists. On day 10 the patient re-presented with severe back pain and left sided sciatica. An urgent lumbar MRI scan was sought, which showed intrathecal haematoma with a subdural collection and marked clumping of the distal cauda equina nerve roots from L4 down, in keeping with arachnoiditis. After urgent consults with neurology, neurosurgery and microbiology, the patient was started on IV linezolid. Over the next three days the patient developed increasing intensity of back pain as well as a headache with mild pyrexia but repeat MRI showed marginal improvement of the haematoma. By day 14 the patient's symptoms were much improved and she was discharged home with oral analgesics and oral linezolid. At her 6-week outpatient review she had mild residual symptoms and repeat MRI showed only mild persistent clumping at L5.

Discussion: A recent case report and literature review described seven further cases of arachnoiditis following EBP for PDPH in obstetric patients [2]. The cause of the arachnoiditis is presumed (as in this case) to be inadvertent intrathecal injection of autologous blood causing inflammation of the nerve roots. Management strategies include antibiotics, intravenous steroids and analgesia, though no consensus