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.

op VBG showed: pH 7.34, BE −4.8, HCO3 20.8. The patient was discharged 48 hours later.

Discussion: Starvation is a cause of liver enzyme derangement. Other differential diagnoses were dehydration, acute fatty liver of pregnancy, pancreatitis and atypical HELLP syndrome. The blood gas pre-delivery showed compensated anion gap metabolic acidosis, likely secondary to starvation ketosis. Physiological acid-base changes that occur during pregnancy reduce the body's buffer capacity. For example, increased alveolar ventilation results in respiratory alkalosis and compensatory renal bicarbonate loss. Vomiting in this context can exacerbate acid-base disturbance, whilst fasting depletes hepatic glycogen stores and accelerates lipolysis, leading to ketone body generation and thus acidosis. Regardless of aetiology, untreated severe metabolic acidosis in pregnancy causes fetal acidaemia and hypoxaemia, with sequelae of prematurity, impaired neurodevelopment, and intrauterine death [1,2]. Early diagnosis of starvation ketosis and prompt treatment with IV glucose may prevent development of severe acidosis and requirement for IV bicarbonate, early delivery and ICU admission.

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P.94 Tachypnoea and COVID-19 infection: Cause and effect?

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Introduction: COVID-19 is a multisystem disorder that usually manifests as respiratory symptoms. However, it is important to be aware that metabolic derangement can also occur, especially in the pregnant population.

Case Report: A 29-year-old (G3P2) woman attended hospital at 37 weeks gestation with breathlessness, lethargy and fever having returned a positive COVID-19 PCR test six days earlier. Physical examination confirmed tachypnoea (>25) with normal lung fields on chest x-ray. Arterial blood gas analysis on air showed compensated metabolic acidosis (pH 7.35, PaO2 12, PaCO2 2.4, Lactate 0.6, HCO3- 14, BE -13, Glucose 5.4) with a raised anion gap (18). There was no evidence of foetal compromise, however obstetric concerns regarding her respiratory rate in the presence of COVID-19 led to discussion about expediting delivery. Initial concerns of a pulmonary embolism (PE) resulted in treatment dose dalteparin being given prior to point of care test results revealing significant ketonaemia (5) and ketonuria. The patient also disclosed a period of nausea with a significant reduction of appetite in the days preceding admission. Therefore, a diagnosis of euglycaemic starvation ketoacidosis was made. The dalteparin was stopped and treatment commenced with IV 10% glucose (100 mL/h) and potassium supplementation. Over the following 24 hours her observations normalised with an improvement in her ABG results (pH 7.36, PaCO2 3.9, HCO3- 18, BE -8, Glucose 7.8) and resolution of ketonaemia. An uneventful caesarean delivery was performed 48 hours after admission under spinal anaesthesia.

Discussion: This case demonstrates the importance of recognising that COVID-19 can manifest symptoms outside of the respiratory tract. Despite a positive diagnosis of the virus, the presenting features were due to metabolic derangement caused by starvation and vomiting. The hypermetabolic state of pregnancy predisposes to severe metabolic disturbance due to insulin resistance as a result of placentally-derived catabolic hormones in addition to reduced renal buffering capacity [1]. The stress response caused by infection would aggravate the presentation further. If immediate delivery was required, general anaesthesia (GA) was the only option as treatment dose dalteparin was given <24 h earlier precluding a neuraxial block. A GA may have worsened the metabolic derangement due to the difficulty, when under anaesthesia, to replicate the patient's own respiratory compensation for the severe acidaemia.

Reference

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P.95 Atrial myxoma in pregnancy

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Introduction: Atrial myxomas are rare benign tumours of the heart leading to a range of clinical features, sometimes with fatal consequences. We describe a case of an atrial myxoma causing severe mitral regurgitation in a 19 week pregnant woman. She underwent successful excision and mitral valve repair and went on to have an uncomplicated pregnancy. This case highlights how excellent team work and communication can ensure a complex case has a positive outcome.

Case Report: A 29-year-old woman presented at 19 weeks gestation with sudden onset chest pain and breathlessness. CTPA showed a large 7.5 cm filling defect in the left atrium. Transthoracic echo confirmed an atrial myxoma which was causing severe mitral regurgitation. Following a multidisciplinary team discussion with the patient regarding risks, it was decided early surgery was in the patient's best interests. At 20 weeks gestation, she underwent mitral valve repair and excision of the myxoma. Cardiopulmonary bypass (CPB) was kept at high flows and high pressures throughout at relative normothermia (34°C). The patient made an excellent recovery and the rest of her pregnancy continued uneventfully. Her labour was induced at 38 + 4 gestation. She received an early epidural and had a vaginal delivery in the delivery room with forceps assistance.

Discussion: Atrial myxomas have an incidence of 0.5 cases per million per year but the reported incidence in pregnant women is unknown [1]. Although benign, they can be life-threatening with cases of heart failure, distant emboli and sudden death all reported. In the non-pregnant patient, cardiac surgery to excise the myxoma is often the treatment of choice. The risk of CPB in pregnancy can complicate this decision. Although maternal mortality is now similar to non-pregnant women, fetal mortality remains high. Risk factors include urgent, high risk cardiac surgery, maternal comorbidities and low gestational age [2]. Delaying surgery until the third trimester or until after delivery of the baby is recommended. In our case, this was not possible. CPB techniques have to be altered with high flow rates (>5 L/min), high pressures (MAP 70–75 mmHg) and mild hypothermia/normothermia all advised to minimise disruption to uteroplacental perfusion [2]. This case demonstrates how early multidisciplinary involvement and planning is paramount in such complex cases. Including the patient in discussions surrounding optimal timing of surgery is important.