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.
Methods: This study used qualitative research methods and prospective ethical approval was obtained before data collection. Semi-structured interviews were carried out with ten healthcare professionals working in a tertiary maternity unit in England. Participants included midwives, anaesthetists, and obstetricians and were identified by a purposeful sampling approach. Interviews were recorded and transcribed, then inductive thematic analysis was used to identify key themes relating to the interview schedule, as well as emergent themes.

Results: Themes relating to the interview schedule included unfamiliarity with qSOFA, differing perceptions of sepsis, and concerns around the flawed nature of clinical investigations used in making a diagnosis. Emergent themes included the role of temperature in diagnosis, and how risk factors are being considered, as well as the theme of ethnicity.

Discussion: This study has increased our understanding of how healthcare professionals perceive maternal sepsis and what they consider when making the initial diagnosis. In particular it demonstrates that different individuals perceive sepsis differently, and that clinicians’ personal definitions of maternal sepsis did not follow current formal definitions. The finding of ethnicity as an emergent theme warrants future research.

Acknowledgments: S. Andersson is funded by a National Institute for Health Research (NIHR), Academic Clinical Fellow Programme for this research project. Thanks to the participants in this study.

References
1. Say L, Chou D, Gemmill A, et al. Global causes of maternal death: A WHO systematic analysis. Lancet Global Health 2014; 2: e323–33.
2. World Health Organization. Statement on maternal sepsis. 2017. https://apps.who.int/iris/handle/10665/254608

Int J Obstet Anesth, 50 (2022) 103442
doi:10.1016/j.iqoa.2022.103442

P147 Maternal, anaesthetic and neonatal outcomes for parturients with ischaemic heart disease
J. Fletcher, B. Jones, K. Bhatia
St Mary’s Hospital, Manchester, UK

Introduction: Cardiac disease is the leading cause of maternal mortality in the UK. Ischaemic heart disease (IHD) contributes to 24% of cardiac deaths [1].

Methods: We retrospectively reviewed records of 13 parturients with a diagnosis of IHD at St Mary’s Hospital between 1 April 2015 and 1 April 2021.

Results: In the study period our centre had 58,876 deliveries, giving an incidence of IHD of 1 per 4528 maternities. Eleven (84.6%) patients had a pre-existing diagnosis and two (15.4%) were diagnosed in this pregnancy. Most patients’ (92.3%) were multiparous. Mean age was 31.8 ±6.9 years and booking body-mass index was 26.53 ±5.29 kg/m².

Predisposing factors for IHD were: family history (38.4%), smoking (23.1%), hypertension (23.1%), and obesity (23.1%). Causes of IHD were: atherosclerosis (53.8%), coronary artery dissection (15.4%), congenital heart disease (7.7%), coronary artery aneurysm (7.7%) and idiopathic (7.7%). A previous ST-elevation myocardial infarction (STEMI) was reported in 61.5% of patients, and non-STEMI in 21.4%. Invasive management of IHD occurred in 73% of patients, with 58% having a percutaneous coronary angioplasty and 15% a coronary artery bypass graft. The majority of patients (77%) had a caesarean delivery (CD). Neuraxial anaesthesia was reported in 90% of these cases. A vaginal birth occurred in 23% of patients with 66.7% utilising epidural analgesia and 33.3% using remifentanil patient-controlled analgesia. Post-partum haemorrhage (>500 mL) was recorded in 15.4% of all patients. There was no maternal mortality. Mean maternal length of hospital stay was 4.7 (±2.5) days. Mean gestation at delivery was 36.2 (±2.3) weeks with 46% of deliveries being <37 weeks. All 10-min Apgar scores were ≥9. Mean birthweight was 2318 g (±476) with 65% being of low birth weight (<2700 g). Neonatal intensive care admission rate was 23%.

Discussion: Our data on parturients with IHD show a high CD, preterm birth rate, and low birthweight consistent with existing literature [2]. Factors contributing to the high CD rate are previous CD (65%) and joint, maternal decision-making with the pregnancy heart team. Fetal outcomes were possibly influenced by beta blocker usage, prematurity, and smoking. Serial inputs from a dedicated pregnancy heart team, and increased postpartum surveillance is mandatory and integral to limit maternal-fetal morbidity and improve outcomes in this cohort.

References
1. Knight M, Bunch K, Tuffnell D, et al. Saving Lives, Improving Mothers’ Care - Lessons learned to inform maternity care from the UK and Ireland Confidential Enquiries into Maternal Deaths and Morbidity 2017–19. Oxford: National Perinatal Epidemiology Unit, University of Oxford, 2021.
2. Baris I, Hakeem A, Moe T, et al. Acute coronary syndrome and ischemic heart disease in pregnancy: data from the EURObservational Research Programme-European Society of Cardiology Registry of Pregnancy and Cardiac Disease. J Am Heart Assoc. 2020; 9: e015490.

Int J Obstet Anesth, 50 (2022) 103443
doi:10.1016/j.iqoa.2022.103443

P148 Pregnancy and COVID 19: a case series at Royal Derby Hospital
M. Elkhayat, F. Eltinay, B. Elwir, S. Botros
Royal Derby Hospital, UK

Introduction: Recent data show pregnancy to be a risk factor for more severe COVID-19, anatomic changes occur in pregnancy which may affect the management of the patient with COVID-19. The upper airway becomes oedematous and friable in pregnancy making intubation more difficult [1]. Pregnancy is a pro-thrombotic state, as is COVID-19 [2]. An incidence of preeclampsia has been described in women with COVID, but some features of COVID-19 infection may mimic preeclampsia. Elevate liver enzymes, thrombocytopenia, and a prolonged aPTT can be seen with both diseases.

Methods: A retrospective audit of pregnant females with COVID-19 required ICU admission from March 2020–January 2022 at Royal Derby Hospital. Results from cases were analysed for need for intubation, mode of delivery, medical management as dexamethasone and tocilizumab and past medical history.

Results: Seven cases needed ICU care, one case was morbidly obese, all cases received dexamethasone, none required ECMO, all were delivered by caesarean section and there was one neonatal death.
Discussion: Proven therapies (such as corticosteroids and tocilizumab) should be offered to pregnant and breast-feeding women as in the non-pregnant population. Women should receive multidisciplinary care with input from senior physicians and early escalation when required.

References

1. Callaghan WM, Creanga AA, Jamieson DJ. Pregnancy-related mortality resulting from influenza in the United States during the 2009–2010 pandemic. Obstet Gynecol 2015; 126: 486–90.
2. Schwartz DA, Graham AL. Potential maternal and infant outcomes from (Wuhan) coronavirus 2019-nCoV infecting pregnant women: lessons from SARS, MERS, and other human coronavirus infections. Viruses 2020; 12: 194.

Int J Obstet Anesth, 50 (2022) 103444
doi:10.1016/j.ijsa.2022.103444

P149 Impact of COVID-19 on maternity and anaesthetic services: a one-year survey
M. Bansal, C. Luximon, P. Kajekar
Luton and Dunstable Hospital, UK

Introduction: The COVID-19 virus can pose a serious threat to mother and baby if contracted during pregnancy. We aimed to ascertain the impact of COVID-19 on our maternity patients at Luton and Dunstable Hospital.

Methods: Data were collected retrospectively from the archived electronic files over a year period from 31 March 2020 to 31 March 2021. Data collected were maternal age, BMI, ethnicity, comorbidities, ante- or postnatal infection, gestational age, single or twin gestation, mode of delivery – vaginal or caesarean section (CS), anaesthetic involvement, location of patient care, oxygen requirement, type of respiratory support, need for critical care admission, duration of hospital stay, maternal mortality and neonatal impact [1].

Results: There were 68 COVID-19 positive patients in hospital over the study period. 72% patients had BMI <30. Significantly more (54%) positive patients were of Asian or Afro-Caribbean origin (P = 0.006). 85% patients of patients were positive antenatally with a mean gestation of 33 weeks (SD 4.79). Of the 15 postnatal infections, most occurred within first five days of delivery, indicating possible cross-infection. With regards to treatment, 88.2%, were asymptomatic and did not require oxygen support, 7.4% required supplemental O2, 2.9% required NIV, and 1.5% required invasive management and transfer for ECMO to a higher centre. Mortality in our study was 2.9% for mothers, both patients were of BAME origin. However, neonatal outcome was good with no associated mortality. 47% of the patients were delivered by CS of whom 20% needed their CS expedited due to COVID-19 having a mean gestation of 29 weeks (SD 4.7). Among the patients who had CS, 93% had a regional anaesthetic and 7% had a GA.

Discussion: BAME was a significant risk factor for pregnant COVID-19 positive patients to be hospitalised. BAME category patients were more symptomatic and required prolonged hospital stay [1]. BMI >30 was not found to be a significant risk factor. COVID-19 caused a high incidences of CTG abnormalities and hence lead to a higher incidence of CS during this period. Regional anaesthesia was performed safely in these patients. Cross infections in maternity unit paved the establishment of Closed Monitoring Unit (CMU) at our centre. Due to the ongoing pandemic, further study is needed to see impact of vaccination on maternity.

Reference

1. RCOG-Coronavirus (COVID-19) infection in pregnancy – guide for healthcare professionals v14.3 2022. https://www.rcog.org.uk/globalassets/documents/guidelines/2022-01-11-coronavirus-covid-19-infection-in-pregnancy-v14.3.pdf
Int J Obstet Anesth, 50 (2022) 103445
doi:10.1016/j.ijsa.2022.103445

P150 Anaesthetic care of women with obesity in pregnancy
E. Foley, S. Cope
Sunderland Royal Hospital, UK

Introduction: Obesity in pregnancy is associated with an increased risk of anaesthetic complications, such as failure of airway management, intravenous access and neuraxial blockade [1]. Therefore, the Royal College of Anaesthetists defined a set of standards for the care of obese pregnant women. Our aim was to measure current practice against these standards; 100% of women with a booking BMI (body mass index) of 40 kg/m² or greater to have an antenatal consultant anaesthetic review and 100% of these patients to be reviewed by the duty anaesthetist on arrival to delivery suite.

Methods: A retrospective audit of 50 sets of patient notes with a BMI 40 kg/m² or greater at booking during the period of January–June 2020 at Sunderland Royal Hospital. It was identified whether the patient had been referred to anaesthetics, the outcome of this referral (either no action required or an appointment in the high-risk clinic) and whether an assessment was made by anaesthetics on the delivery suite. Ethics approval was not required for this audit as advised by the trust’s clinical effectiveness department.

Results: A total of 54% of eligible patients were referred to anaesthetics; 100% of these patients were screened by an obstetric anaesthetist with 41% of those patients being seen in the high-risk clinic. Only 6% of all patients were assessed by a member of the anaesthetic team on arrival to delivery suite with a plan documented in the notes.

Discussion: There must be a more robust system for the referral of high BMI patients to anaesthetics both antenatally and on delivery suite in order to plan early for the management of predicted difficult airway, intravenous access and neuraxial blockade as well as the early involvement of senior anaesthetic help. We have now written a guideline to ensure the above standards are met in future and this will be re-audited after the guideline is implemented.

Reference

1. Beckett VA, Knight M, Sharpe P. The CAPS Study: incidence, management and outcomes of cardiac arrest in pregnancy in the UK: a prospective, descriptive study. BJOG 2017; 124: 1374–81.