Appendix I: Implications of COVID-19 on reducing preterm births

25 June 2020, Version 1

Information for healthcare professionals

Introduction
Data have been collated from accumulated case reports and series around the world (see, for example, this resource). At the moment, they indicate that women admitted to hospital with COVID-19 have an increased risk of preterm birth (up to 25% in some reports). A significant proportion of these appear to be on account of indicated intervention for deteriorating maternal health, rather than spontaneous preterm birth.

Data from UKOSS, the biggest UK cohort to date, suggest a comparable incidence of preterm birth in the UK population with studies from other countries; however, numbers are still too small to be able to extract a reliable figure. This appendix looks at what can be done to support SBLCBv2’s aim to reduce preterm birth in this new environment.

Prediction of preterm birth
It remains essential that a thorough risk assessment is performed at the booking appointment. Women who are assessed as being at high or intermediate risk of preterm birth should continue to be offered additional screening tests, such as transvaginal scanning of the cervix. It is recognised that the number of visits may need to be reduced and the use of telephone/video consultations may be considered when a scan is not necessary.
It is preferable to time hospital visits to coincide with existing antenatal clinic consultations to reduce patient attendance. In addition, the current crisis may lead to a reduction in scanning capacity, so units may consider prioritising women who are at particularly high risk, for example those who have previously had mid-trimester birth. Judicious use of local network capacity and capability may limit these shortfalls. If a reduction of scans is necessary, it is important for at-risk women to have appropriate contact details for expert advice between appointments.

**Preventive strategies**

Following risk assessment, women should continue to be offered screening/treatment for bacteriuria, smoking cessation advice, and the use of prophylactic aspirin where appropriate. Women identified as having a short cervix may still be offered preventative strategies in the form of cervical cerclage, progesterone or cervical pessary. If there is time, hospitals may choose to screen women for COVID-19 before they undergo cervical cerclage. It would also be preferable to avoid general anaesthesia, preferring regional anaesthesia for such surgical cases.

**Preparation for imminent preterm birth**

In the current environment, it is even more important to reduce unnecessary hospital admission. Acknowledging that the clinical management of threatened preterm labour remains difficult, recent data from the EQuiPP and QUIDS studies show that the diagnosis of preterm labour can be optimised with the use of quantitative fetal fibronectin, and algorithms such as the QUiPP app (for example, see the helpful online toolkit on the BAPM website). In units which offer transvaginal scan assessment of the cervix, this may also be used within the QUiPP algorithm. It is recognised that many units may be relying on other near-patient diagnostic tests; these should be used with caution in line with recent recommendations from NICE.

The use of antenatal corticosteroids, magnesium sulphate and in utero transfer should continue in women identified as being at imminent high risk of preterm birth; however, the prevailing clinical context should always guide their use. It is reasonable to restrict use of antenatal betamethasone and dexamethasone for fetal reasons to those women imminently likely to deliver between 22+0 and 33+6 weeks, and to conduct a multidisciplinary discussion prior to their use at later gestations (for example, where prelabour caesarean section for maternal compromise secondary to COVID-19 is planned – although urgent intervention for birth should not be delayed for their administration).

For women hospitalised with COVID-19 and requiring oxygen, the most recent RCOG advice (based on the findings of the RECOVERY trial) is that ‘steroid therapy should be considered for 10 days or to hospital discharge, whichever is sooner…use oral prednisolone 40 mg once a day or intravenous hydrocortisone 80 mg twice a day.’ It is important to note that although
these drugs will provide maternal benefit, they are not suitable for fetal preparation as they do not cross the placenta in their active forms.

**Importance of research participation**

Surveillance registries for women with confirmed COVID-19 (such as UKOSS, PAN-COVID) are encouraged in order that more accurate and timely data are available to improve the care of these women and their babies.

Likewise, interventional studies supported by the NIHR-CRN such as RECOVERY specifically seek inclusion of pregnant women with COVID-19 and the opportunity to participate should be extended to all these women.

**Magnesium Sulphate for Fetal Neuroprotection during the SARS CoV-2 Pandemic**

Further information on the PReCePT programme during the COVID-19 pandemic can be found on the AHSN Network website.

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