

Appendix G: Guidance for maternity services regarding fetal growth surveillance and management during the coronavirus (COVID-19) pandemic

Information for healthcare professionals

Introduction

This guidance is an advisory document for maternity services to use in the evolving coronavirus pandemic. It is designed to advise healthcare providers on how to mitigate risk when needing to adjust provision of services, while recognising the evidence-based guidance of both the [RCOG Green-top Guideline 31](#) and [Saving Babies' Lives Care Bundle Version 2 \(SBLCBv2\)](#).

The ability to provide ultrasound scans (USS) for growth surveillance/assessment and fetal monitoring during the COVID-19 pandemic will depend on configuration of local services, skills of available staff and support services.

The RCOG has prioritised ultrasound examinations according to their indication, in the event of staffing shortages. This document should be read in conjunction with the [RCOG guidance for antenatal screening and ultrasound in pregnancy in the evolving coronavirus \(COVID-19\) pandemic](#).

Scans should be prioritised in the following order:

- anomaly scan at 18+0 – 23+0 weeks
- ultrasound +/- screening at 11+2 – 14+1 weeks
- growth scans.

Ensuring that access to ultrasound for growth and wellbeing is used appropriately

[RCOG guidance for antenatal screening and ultrasound in pregnancy in the evolving coronavirus \(COVID-19\) pandemic](#) should be followed with regards to screening of women for symptoms of COVID-19 attending for ultrasound, precautions when women attend and how to manage delayed appointments.

Situations where delaying appointments would not be clinically acceptable are cases of severe fetal growth restriction when the fetus is potentially viable (estimated fetal weight >500g), prompting referral to fetal medicine services (as outlined in RCOG guidance for fetal medicine units COVID-19).

Modifications for service

Risk assessment of women for fetal growth disorders at booking antenatal visit

Risk assessment should occur at the time of booking the appointment, in accordance with current guidance in [SBLCBv2](#) element 2 and figure 6, recognising that this may need to be by telephone or video link.

Women in low-risk group

Women assessed as low risk for fetal growth disorders should continue to have surveillance for fetal growth disorders by symphysis-fundal height (SFH) in line with [RCOG guidance for antenatal screening and ultrasound in pregnancy in the evolving coronavirus \(COVID-19\) pandemic](#).

When the SFH measurement is <10th centile, or there is concern regarding the trajectory of serial measurements, a referral for USS should be made and performed within seven days. If estimated fetal weight (EFW) is >10th centile, the woman should continue on the low risk pathway.

Women unsuitable for SFH measurement (eg BMI ≥ 35 kg/m², multiple fibroids) should follow the moderate risk pathway.

Women in moderate or high-risk groups

Table 1 of this appendix (see page 5) provides maternity services with guidance on how to reduce demand on USS resources during the COVID-19 pandemic. Assessment of services should be made weekly. Decisions on anticipated availability should be made at the beginning of each week to allow women to be contacted if USS is to be delayed. It is

possible that staffing levels may change during the week, so RCOG advice on daily discussion with senior team members should be followed (see [RCOG guidance for antenatal screening and ultrasound in pregnancy in the evolving coronavirus \(COVID-19\) pandemic](#)). When determining availability of ultrasound resources for growth scans, RCOG guidance prioritising anomaly and first trimester scans must be followed. Table 1 uses a traffic light system to assess capacity to deliver a normal (green), reduced (amber) or minimal (red) service.

Individual units should identify clinicians capable of assessing and triaging for risk of fetal growth disorders to assist with triaging of referrals, which could be done either in person or remotely. It is recognised that within individual units the demand in each of the categories (moderate and high) will vary. As such, units may need to make some local decisions about risk factor prioritisation within and across categories.

Women should only receive one method of fetal growth surveillance; thus women in the moderate/high-risk groups following a modified USS pathway do not need to have SFH measured.

Evidence for fetal growth surveillance following COVID-19 infection

It is recommended that women who required hospital admission for confirmed COVID-19 are referred to antenatal ultrasound services for a fetal growth scan; 14 days following resolution of the acute illness (see bullet point 5.2 in [the RCOG guidance on coronavirus \(COVID-19\) infection and pregnancy](#)). Although there is currently no evidence that fetal growth restriction (FGR) is a risk of COVID-19, two-thirds of pregnancies with SARS were affected by FGR and a placental abruption occurred in a MERS case,^{1,2} so ultrasound follow-up seems prudent.

Management of women in whom a fetal growth disorder has been diagnosed

Care should be individualised for women in whom a fetal growth disorder has been diagnosed and monitoring by more frequent USS (+/- advanced Dopplers) is required. Units should identify clinicians capable of interpreting growth scans and Doppler measurements to assist with triaging of referrals for fetal monitoring, which could be done either in person or remotely.

¹ Swartz D, Graham A. Potential maternal and infant outcomes from coronavirus 2019-nCoV (SARS-CoV-2) infecting pregnant women: lessons from SARS, MERS, and other human coronavirus infections. *Viruses* 2020;1-16. 29.

² Alserehi H, Wali G, Alshukairi A, et al. Impact of Middle East Respiratory Syndrome coronavirus (MERS-CoV) on pregnancy and perinatal outcome. *BMC Infect Dis* 2016;1-4

Ultrasound surveillance in women with diabetes and multiple pregnancies

NICE guidance details ultrasound surveillance for [women with diabetes](#) and [multiple pregnancy](#), with RCOG guidance specific to [monochorionic twin pregnancies](#). Table 2 in this appendix (see page 6) suggests guidance for how maternity services can reduce demand on USS resources in this group.

For multiple pregnancies where there is abnormal growth, it is suggested that fetal medicine input is obtained when EFW discordance is $\geq 25\%$, to determine frequency of USS assessment.

Table 1: Suggested pathways for women at risk of fetal growth disorders to reduce demand on USS resources during the COVID-19 pandemic

Workforce availability (FTE)	Uterine artery Doppler at anomaly scan for fetal growth risk assessment*	Ultrasound surveillance for growth: moderate risk category	Ultrasound surveillance for growth: high risk category	Change to management for those with normal growth
Able to provide normal service	As per local/national guidance (see RCOG Green-top Guideline 31 and SBLCBv2).	As per local/national guidance (see RCOG Green-top Guideline 31 and SBLCBv2).	As per local/national guidance (see RCOG Green-top Guideline 31 and SBLCBv2).	As per local/national guidance (see RCOG Green-top Guideline 31 and SBLCBv2).
Reduced service (>50% still working) (Phase 1)	Provide where possible in high-risk group, at time of anomaly scan. If normal, manage as moderate risk; if abnormal, continue on high-risk pathway.	Aim for 2 USS in third trimester: 30-32 weeks and 36-37 weeks is suggested.	USS from 28 weeks, every 4 weeks until delivery.	Timing of delivery to be determined by indication for growth scan: eg maternal age ≥40 years IOL at 40 weeks
Minimal service (<50% still working) (Phase 2)	Provide where possible in high-risk group, at time of anomaly scan. If normal, manage as moderate risk; if abnormal, continue on high-risk pathway.	Aim for 1 USS in third trimester: 36 weeks is suggested.	Aim for 2 USS in third trimester: 30 and 36 weeks is suggested.	Consider IOL at 38-39 weeks in moderate-risk category and 37-38 weeks in high-risk category**

*Availability of uterine artery Doppler may need to be assessed independently of growth, recognising that not all ultrasonographers may be trained to perform uterine artery Dopplers.

IOL – induction of labour

**IOL may be considered to mitigate the risk of lack of growth surveillance at term and to delivery. It is recognised that this will need to be on a case-by-case basis (assessing risk) and unit to unit (assessing availability of USS v labour ward) capacity.

Table 2: Suggested surveillance pathways for women with diabetes or multiple pregnancy to reduce demand on USS resources during the COVID-19 pandemic

Workforce availability (FTE)	Gestational diabetes	Pre-existing diabetes (Type 1 and type 2)	DCDA twins*	MCDA twins*
Able to provide normal service	As per local/national guidance (see RCOG Green-top Guideline 31 and SBLCBv2).	As per local/national guidance (see RCOG Green-top Guideline 31 and SBLCBv2).	As per local/national guidance (see RCOG Green-top Guideline 31 and SBLCBv2).	As per local/national guidance (see RCOG Green-top Guideline 31 and SBLCBv2).
Reduced service (>50% still working) (Phase 1)	USS at 36 weeks to help plan delivery	Good glycaemic control: 28 and 36 weeks Poor glycaemic control: 28, 32, 36 weeks	Aim for 3 USS in third trimester: 28, 32 and 36 weeks is suggested.	USS at 16, 18, 20, 22, 26, 30, 34 weeks
Minimal service (<50% still working) (Phase 2)	USS at 36 weeks to help plan delivery	Good glycaemic control: 36 weeks Poor glycaemic control: 30 and 36 weeks	Aim for USS at 32 weeks**	USS at 19, 23 and 32 weeks**

*DCDA: dichorionic diamniotic twins; MCDA: monochorionic diamniotic twins.

**In women with multiple pregnancies aiming for vaginal birth where a USS has not been performed near to delivery, a presentation scan should be performed on admission in labour.

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