

Ultrasound Scans in Pregnancy during COVID-19 Pandemic

*Guidance adopted from ‘Guidance for antenatal screening and ultrasound in pregnancy in the evolving COVID-10 pandemic’, RCOG 23/03/2020 and ‘Guidance for maternal medicine services in the evolving COVID-19 pandemic’, RCOG 03/04/2020. This guidance is also based on the ‘Saving babies’ lives care bundle Version 2: COVID-19 information- Guidance for maternity services regarding fetal growth surveillance and management during the coronavirus (COVID-19) pandemic.*

General Guidance

* All women planning to attend for a scan should be screened for symptoms suggestive of COVID-19, and their scan deferred seven days from when the symptoms started, if they are symptomatic. Ongoing symptoms, other than persistent cough should result in further delay of the scan until these symptoms have resolved. Women will be contacted the working day before their appointment to be screened and also asked before permitted entry into ANC.  
  Those self-isolating because of a potentially infected household member must defer their scan for 14 days. Advice should be sought from a consultant obstetrician if there is concern about the safety of delaying the scan. The local guidance detailed below will assist with decision making.
* Scans should be prioritised in the following order;
  + Anomaly scan at 18+0 to 23+0 weeks
  + Dating +/- screening at 11+2 to 14+1
  + Growth scans
* If the service is only able to provide a single scan, it is recommended that it is performed at 18+0 to 20+0 weeks with the option for the quadruple test for women who wish to be screened for trisomy 21
* If for any reason ultrasound is not possible the quad test can be offered based on the LMP between 14+2 and 20+0 weeks. There is a reduction in performance of the quad test, but this is acceptable.

This is local guidance, agreed at departmental level, and is phased so that there is not an unnecessarily harsh and premature reduction in ultrasound until this is mandated by inadequate staffing levels.

However, there is also the need to reduce ultrasound scanning to decrease the exposure of pregnant women, and staff members, to COVID-19, irrespective of sonographer capacity. Evidence from Wuhan demonstrates a higher infection rate amongst ultrasound staff than other clinicians. It must also be appreciated that a reduction in ultrasound scanning may increase the burden of community midwifery reviews, and a balance must be reached.

All evidence available indicates that there is an increased risk to women, particularly after 28 weeks with preterm births being reported, and as such unnecessary exposure to other pregnant women and staff in the hospital environment is putting both mother and baby in danger (RCOG).

It is necessary to decrease exposure as described by the UK Government whose advice is for women to stringently engage with social distancing measures to reduce the risk of infection. Weighing up the benefits of the scan versus the potential for infection of COVID-19 is essential. NHS England rationalises changes in the provision of maternity care, stating that it needs to be ensured that staff are not overwhelmed and stretched too far by the additional strain on services due to self isolation and staff sickness as well as the higher number of patients needing care directly due to COVID-19.

In addition, patients seen within the Pregnancy Assessment Centre (PAC) are triaged and assessed in a confined area with very little space for staff or patients. A reduction in women attending Antenatal Clinic (ANC) would mean that there is space available in the clinic to utilise the unused clinic room for triaging of women in PAC. It has been known for some time that there is inadequate space in ANC for the patient throughput and as such, spreading out the appointments over the day is impossible to do due the space constraints. Therefore, the only solution is to reduce the amount of scans performed.

In conclusion, the strategy allows us to care and protect our women and their babies whilst also ensuring we protect our NHS staff and service.

**Phase 1**

**Antenatal ultrasound has 2 members of staff shielding, and has had one member of staff returning from 14 days isolation due to a family member being unwell. During this time we have managed the service but have needed to cancel leave to manage the workload appropriately. There hasn’t been a reduction in numbers of scans performed and women have been exposed numerous times in the clinic environment to numerous members of staff. It is essential that we move forward with phase 1 immediately to mitigate risk to our patients and staff.**

**Dating and NT screening/scan**

*The aim is to limit the time that the patient is in the ANC department/scan room and overall exposure*

* There will be only one attempt at measuring the NT within the allocated appointment slot. The sonographer may ask the woman to move around in an attempt to obtain the measurement; this must be **within the scan room only**. The patient must not be asked to mobilise outside of the scan room.
* If the patient attends for the dating scan but is too early for the NT measurement, second trimester screening will be offered. A repeat appointment must not be made unless the first scan is below 10+0. If the scan is below 10+0 then another dating scan appointment is to be made within the first trimester screening timeframe (11+2 to 14+1).

**Anomaly scan**

* There will be only one attempt at completing the scan within the allocated appointment slot. The sonographer may ask the woman to move around in an attempt to obtain all views, this must be **within the scan room only**. The patient must not be asked to mobilise outside of the scan room.
* Repeat anomaly scans where the first attempt is incomplete **must not be arranged.**
* In line with recent RCOG guidance the anomaly scan timeframe has been extended, however a local decision has been made to aim to bring all women within the 18+0 to 20+6 timeframe with the exception of women with a BMI >=35 who’s appointment should be arranged between 21+0 to 23+0.

**Growth surveillance**

* Routine growth scans for IVF, BMI 35-39.9, Maternal age less than 18 (assess diet to ensure healthy, balanced diet – if not, scans needed), single uterine fibroid of <6cm, GDM diet controlled must stop. All other indications to be scanned 4-weekly from 26-28 weeks.
* Continue to **not** refer LFD for scan (as per our current guidance) unless there is a clinical suspicion of polyhydramnios.
* Continue to **not** scan for previous LFD unless the woman is diabetic or has had a delivery complicated by a shoulder dystocia (in which case the scan should be at 36 weeks)
* Do **not** offer a growth scan for the first episode of **altered fetal movements**. If the CTG is normal and the Fundal-Height Measurements (FHM) are within the range on the GROW chart, reassure the woman and continue with the most recent plan of care. Altered fetal movements at term (>=37 weeks) require senior obstetric review/discussion to decide whether a scan is indicated and whether IOL should be offered.
* Do **not** offer a scan for recurrent altered fetal movements if previous episodes were more than 3 weeks prior to the current and movements have been reassuring between episodes.
* If persistent altered fetal movements within 3 weeks but have had a normal scan within this period, a further scan is **not** required unless CTG or FHM concerns.
* Only refer for growth scan if FHM has dropped by 40 centiles (e.g. 90th to 50th centile or 50th to 10th centile etc). If FHM has dropped 20-40 centiles and is above the 10th centile, repeat FHM 2 weeks later. If growth linear then no need for scan.
* **Obstetric Cholestasis** – scan once only when the diagnosis is made but **do not** repeat unless additional reasons to do so.
* **Polyhydramnios** – only perform follow-up scan if MPD >10cm and then perform 4 weeks later if stable. If MPD >12cm refer to local fetal medicine clinic (SC21A Monday PM). Ensure GDM is ruled out as per recent maternal medicine during COVID-19 pandemic guideline.
* If EFW <10th centile or AC <5th centile then offer fortnightly scans only. If scanning SGA (<10th centile EFW or <5th centile AC) and LV/UA doppler are normal **do not** scan a week later for LV/doppler. Rescan with growth, LV and Doppler in 2 weeks unless concerns with FMs.
* **PPROM** scan fortnightly unless doppler abnormal.
* **Low lying placenta** at 20 weeks – scan at 36 weeks for localisation unless previous delivery prior to 36 weeks, APH or at risk of Abnormally Invasive Placenta (AIP). If AIP suspected/high risk, then refer as per regional API pathway.

DCDA twins

* Scan at 20, 28, 32 and 36 weeks. If **growth discordancy >20% in EFW at 20 weeks**, refer for local fetal medicine clinic (SC21A Monday PM) at 24 weeks. The sonographer may refer directly.

MCDA twins/MCMA twins

* Scan at 18, 20 and 2 weekly thereafter and can be 4 weeks after 26 weeks if growth linear and not more than >20% discordant

**Cervical length**

* If more than 1 loop diathermy, cone biopsy, previous unexplained 2nd trimester loss, previous pre-term birth <32 weeks (spontaneous) offer cervical length at 16 weeks and telephone consultation. If normal, do **not** repeat.

**Phase 2**

**With 2 members of staff shielding, loss of a further 2 members of staff could indicate a need to move to Phase 2. This needs to be discussed weekly with the senior members of the team.**

* Dating and anomaly scans as per Phase 1
* In addition to Phase 1, stop routine scanning for **maternal age 40 or above, smokers, substance misuse and essential hypertension without medication.**
* Anyone needing serial scanning (except twins or previous adverse outcome before 32 weeks) should be scanned at 32 and 36 weeks **only**.
* GDM (diet, insulin and metformin controlled) only to be scanned at 36 weeks unless poorly controlled and no other medical conditions including previous SGA <10th centile/BMI >=40 in which case scan at weeks 32 and 36 weeks.
* Type 1 and type 2 diabetics with good control scan at 28 and 36 weeks.
* Type 1 and type 1 with poor control scan at 28, 32 and 36 weeks.

**Phase 3**

**If 3 or more staff members (excluding the 2 shielding) are lost to illness or self isolation, it would be prudent to move towards Phase 3. This will be done with discussion of the senior team and only instigated when all other avenues have been explored.**

* Dating and anomaly scan to be combined at 18+0 to 20+0. Second trimester screening for downs syndrome only will be offered at this time (Edwards & Patau’s screening will be performed with the scan). It is accepted that there will be a higher incidence of missed abnormalities if in this phase.
* **All other scan requests to be discussed with a consultant obstetrician.**