TYGERBERG HOSPITAL
Department of Obstetrics and Gynaecology: General Specialist Services

GUIDELINE FOR INDICATIONS FOR GROWTH SCANS IN THE HIGH RISK CLINIC

Rationale:

This guideline aims to decrease the number of unnecessary (not clinically indicated) growth scans being performed in the HRC and to subsequently reduce workload & pressure on the clinic. When deciding on whether a growth scan is indicated, always carefully assess gestational age before requesting a growth scan.

Indications for Growth scans based on SFH monitoring:

- SFH <p10 for GA as per gravidogram, as a new finding since the last examination
- 3 SFH measurements that plateau (even if not crossing p10) over at least a two week period
- Current SFH that is less than SFH 2 visits previously (even if not crossing p10)

It is acknowledged that SFH monitoring alone is not sufficient to detect fetal growth restriction, especially in pregnancies at high risk for placental insufficiency.

24 weeks – 32 weeks: GROWTH SCANS GENERALLY NOT INDICATED
Umbilical artery Doppler (UAD) is the investigation of choice to exclude early onset growth restriction (24 -32 weeks). Therefore, if SFH is suggestive of growth restriction, the initial investigation is UAD, NOT a growth scan.

UAD is performed routinely (irrespective of SFH) at 24 – 32 weeks for **previous**:

IUGR baby	Eclampsia
Unexplained stillbirth	Pre-eclampsia
Preterm birth (not due to cervical incompetence)	Abruptio placentae

Conditions requiring UAD at 24-32 weeks (irrespective of SFH) in the **current pregnancy**:

Diabetes	Morbid Obesity BMI >40
Chronic hypertension	Auto-immune diseases
Gestational hypertension	

If the UAD is normal in these conditions, current early onset IUGR has been excluded and a growth scan is not necessary. This situation needs to be reassessed after 32 weeks.

Growth scans after 32 weeks based on SFH:

UAD monitoring must still be done but will often not detect late onset IUGR (beyond 32 weeks).

If SFH is less than P10 for gestational age or plateauing beyond 32 weeks (see above), then a growth scan should be performed.

At the growth scan, ALL fetal biometry measurements (BPD, HC, AC, FL as well as EFW) should be taken, recorded on the formal ultrasound report form AND plotted against centiles for gestation (also plot the previous ultrasound measurements to look at trends). The AFI should also be measured.

The SGA protocol should then be consulted to determine management.

Growth scans should not be repeated outside the protocol and not sooner than 3 weeks apart.

"Routine" Growth scans after 32 weeks (Regardless of SFH) in the presence of normal UAD:

In certain patients, SFH monitoring is insufficient for accurate exclusion of fetal growth restriction. In these cases, a routine growth scan **at 36 weeks** will best detect late onset placental insufficiency. Patients at particularly high risk of IUGR should also receive routine late growth scans:

Super morbid obesity (BMI >50)	Abnormal uterine artery Doppler earlier in the pregnancy
Morbid obesity (BMI >40) with hanging pannus or difficult to palpate uterus	Previous severe or early onset (pre)eclampsia
Multifibroid uterus (if fibroids large)	Previous abruption
Hypertensive conditions	Previous late IUGR
Previous unexplained stillbirth	

These patients should receive **one** growth scan only, at 36 weeks. If growth is good, there is no need to repeat a growth scan unless a new clinical problem arises.

"Routine" Growth scans after 32 weeks in Diabetics at the High Risk clinic:

Diabetic mothers should receive UAD monitoring at 24 -32 weeks, then a growth scan **at 36 weeks** to assess for late placental insufficiency or macrosomia and to determine mode of delivery. EFW for mode of delivery can also be assessed clinically at late pre-term/ early term for these patients, especially if the abdomen examines well.

Signed: 

AUTHORISED BY	Z Momberg
COMMITTEE RESPONSIBLE	Z Momberg, L Geerts, GS Gebhardt
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