



Protocol for small for gestational age (SGA) fetus with normal Umbilical Artery Doppler (UAD)

Clinical problem:

SF growth <10th centile (if previously normal)/plateau of growth/growth crossing centiles in otherwise uncomplicated woman

- If at community clinic (MOU/BANC+): refer to closest ultrasound service/district hospital doctor's clinic:
 - Verify correct dating (history, first scan)
 - Perform growth scan including liquor volume (deepest vertical pool/DVP) and Doppler
 - Plot size and Doppler on graphs for correct gestation
 - **If not SGA on ultrasound as above and normal Doppler (<95th centile), this protocol does not apply and the patient can be referred back to her clinic.**
 - **If current EFW < P10 OR HC/AC > P95 (OR AC < P5 if head measurements difficult) for the correct gestation, further management must remain at the district hospital (reference ranges: Salomon, Snijders, INTERGROWTH, NOT Theron or Fenton)**
 - **If UAD >95th centile, follow the protocol for abnormal UAD (regardless of growth centile)**
 - Advise on smoking, alcohol, etc.
 - **Rule out PE at least two-weekly**
 - Once viable: Instruct mother on **daily kick count chart**

SGA pregnancies are at risk of term IUFD (rarely preterm), fetal distress in labour and preeclampsia

This finding is not a contra-indication to vaginal delivery but requires continuous CTG monitoring throughout labour

SGA < 28 weeks: Repeat growth scan + UA Doppler at 27-28 weeks (unless done in last 3 weeks)

SGA ≥ 28 weeks: Repeat UA Doppler 2 weekly

- **If EFW < P3 on diagnosis, Doppler remains normal and no PE:** Repeat growth scan at clinic at **34 weeks**, incl. EFW, DVP – **Plot Size and Doppler on graphs for correct gestation.**
 - Adequate growth trend AND normal liquor AND reactive CTG – aim to deliver at 36⁰-36⁶ weeks
 - Clearly slowing growth trend OR reduced liquor (DVP < 2cm): perform CTG

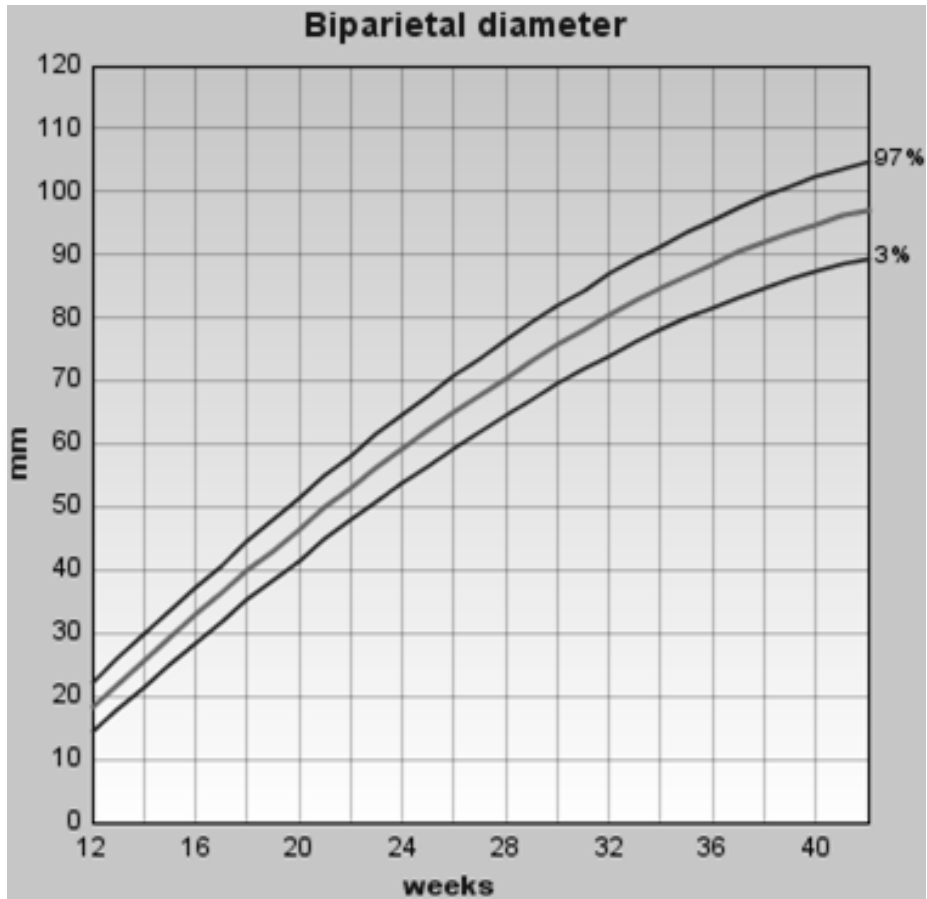
- CTG reactive – repeat CTG at 35 weeks - aim to deliver at 36 weeks
- CTG non-reactive twice on same day (long strip) – admit and consider delivery. **Make sure patient is at the correct level of care for the anticipated GA at delivery and anticipated birthweight.**
- **If EFW P3-10 on diagnosis, Doppler remains normal and no PE:** Repeat growth scan at **36 weeks**, incl. EFW, DVP and do CTG.
 - If EFW at 36 weeks remains > P3 AND adequate growth trend AND normal liquor AND reactive CTG – aim to deliver at 40 weeks.
 - If EFW at 36 weeks is clearly slowing growth trend (but still above P3) OR reduced liquor (DVP < 2cm):
 - CTG reactive – repeat CTG at 37 weeks – aim to deliver at 38 weeks
 - CTG non-reactive twice on same day – admit and consider delivery
 - If EFW at 36 weeks is < P3: admit and consider delivery.

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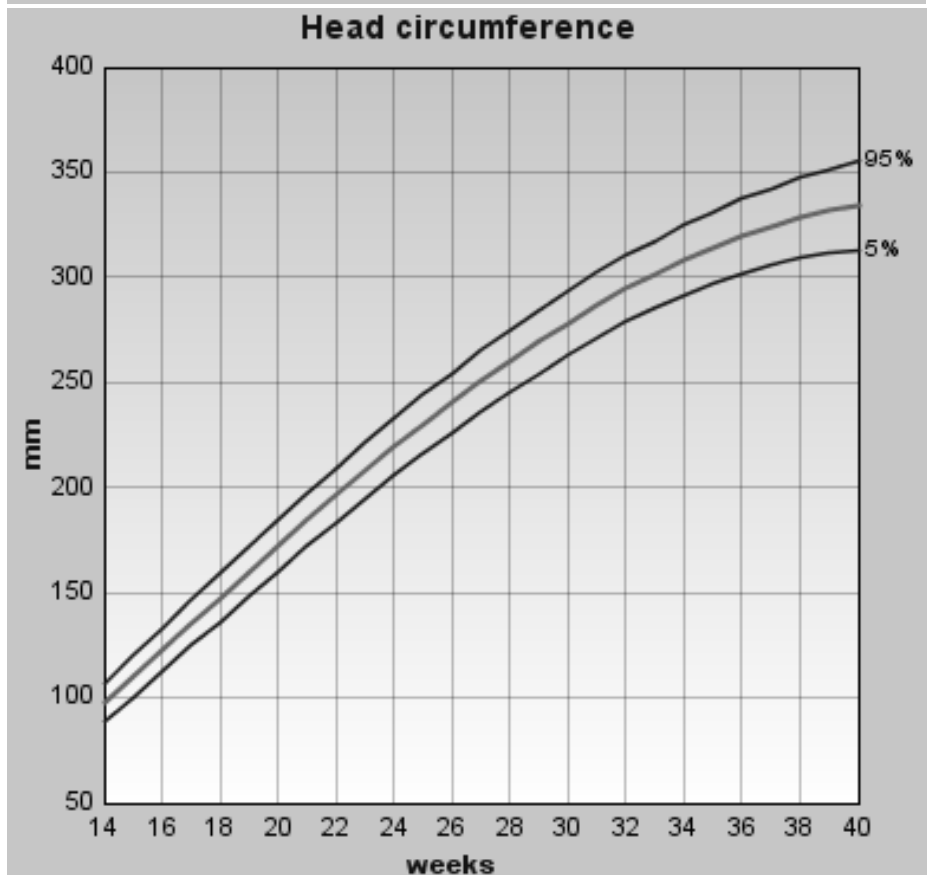
Signed



GS Gebhardt

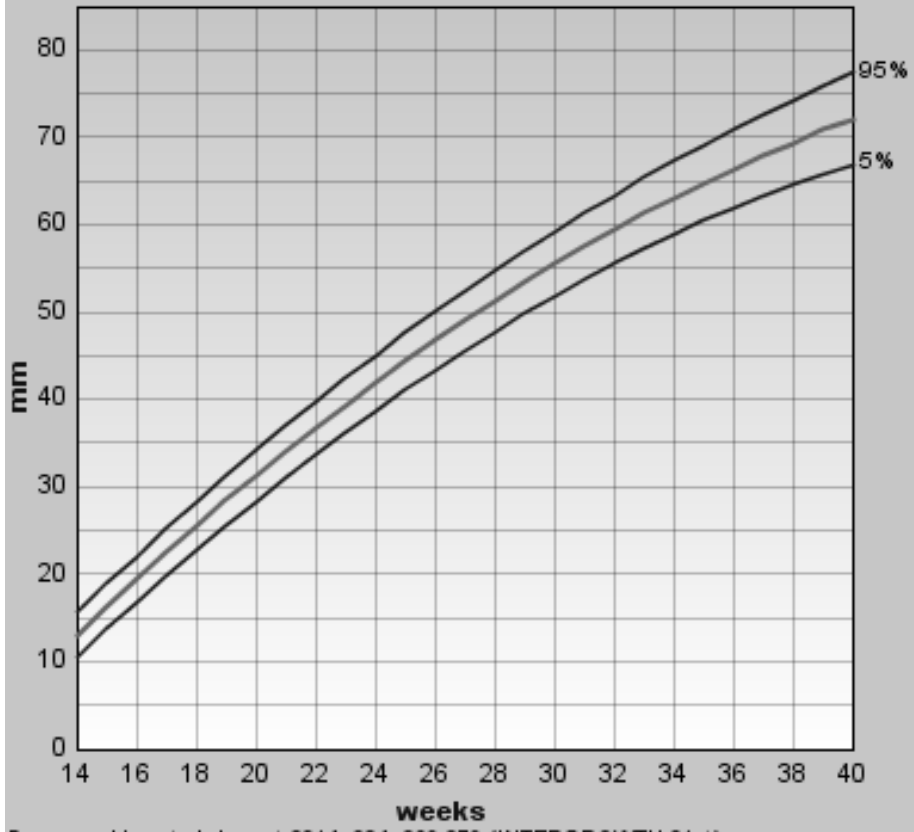


Chitty et al. BJOG 1994; 101: 35-43

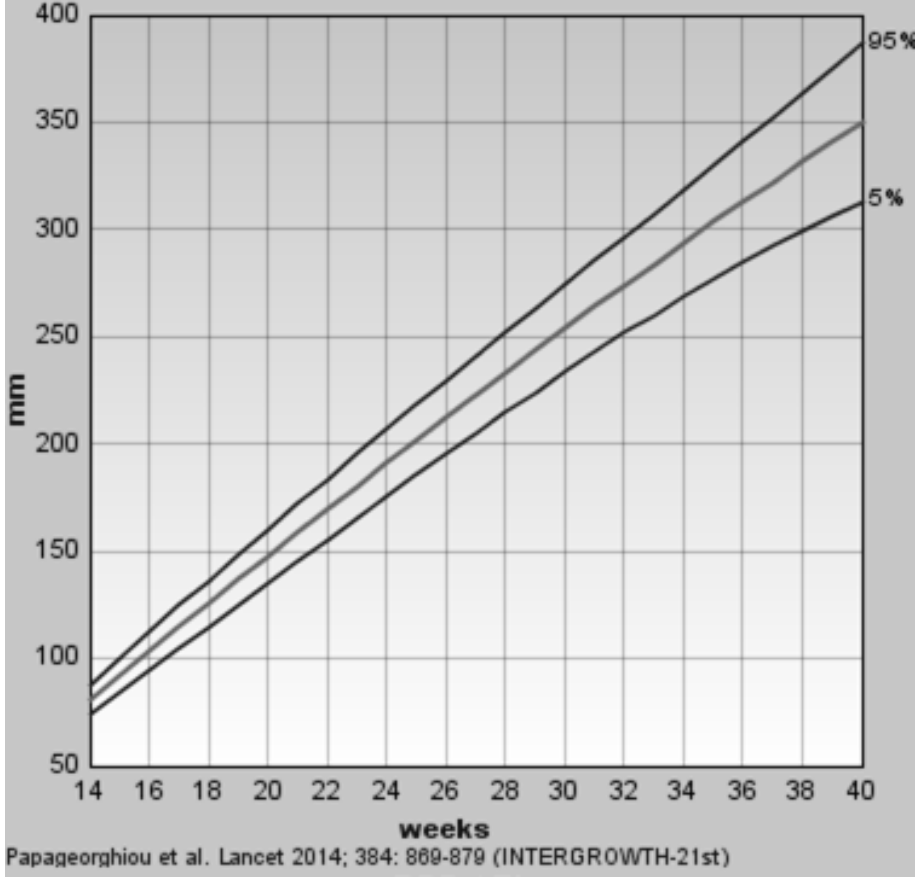


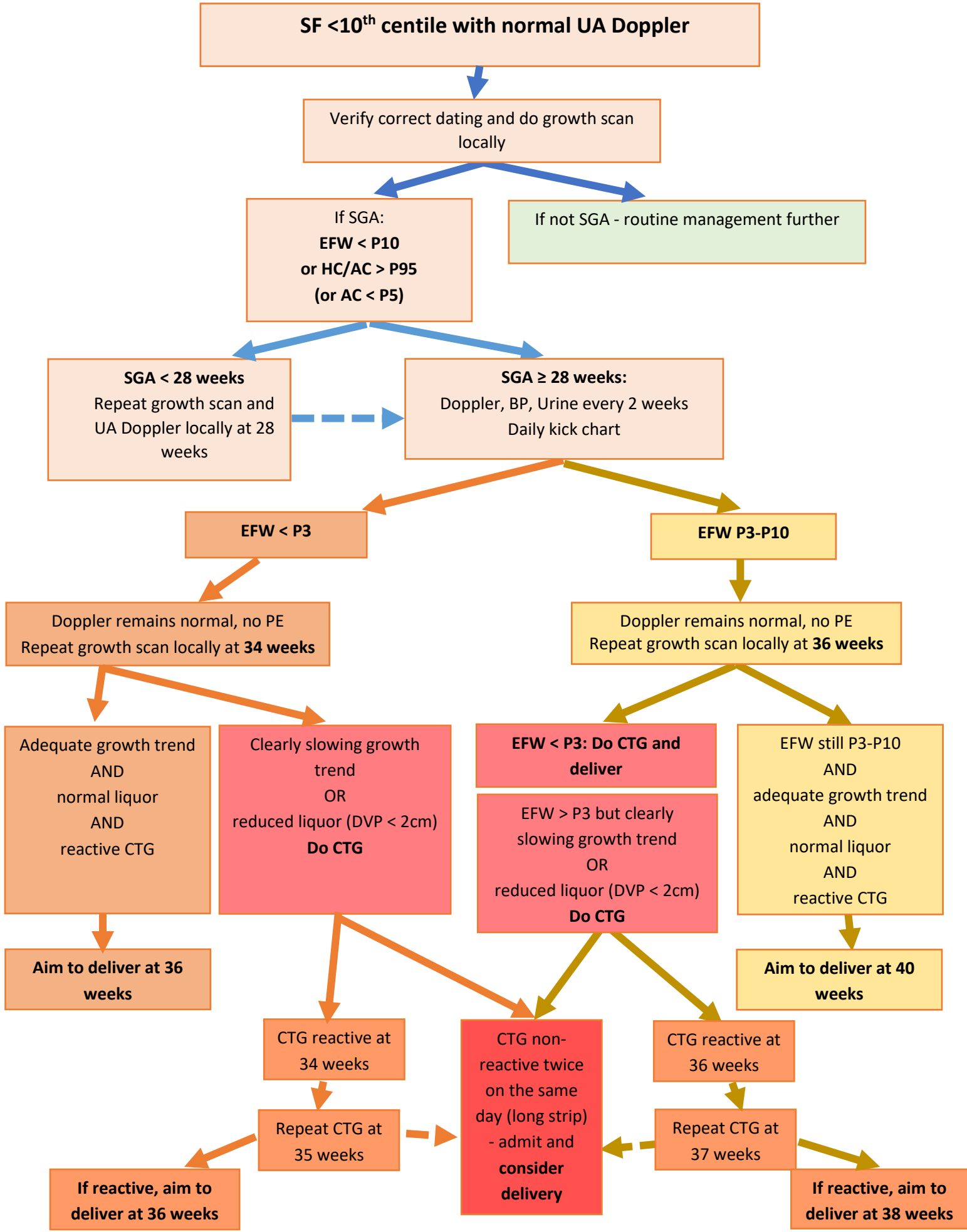
Papageorgiou et al. Lancet 2014; 384: 869-879 (INTERGROWTH-21st)

Femur length



Abdominal circumference





GIRLS (rounded)						
Weeks ↓	P3	P10	P50	P90	P97	
20	265	285	343	400	420	
21	325	345	419	490	515	
22	375	405	493	580	610	
23	430	465	572	680	710	
24	495	535	662	790	830	
25	575	620	767	915	960	
26	665	715	890	1065	1115	
27	770	830	1031	1230	1295	
28	890	965	1192	1420	1490	
29	1030	1110	1369	1630	1710	
30	1175	1270	1561	1855	1945	
31	1330	1435	1761	2090	2190	
32	1485	1600	1964	2330	2445	
33	1630	1755	2162	2570	2695	
34	1760	1895	2345	2795	2935	
35	1860	2010	2503	2995	3150	
36	1920	2085	2624	3165	3330	
37	2110	2330	2800	3320	3600	
38	2280	2500	2970	3510	3780	
39	2420	2650	3130	3660	3940	
40	2550	2780	3260	3800	4080	
41	2650	2890	3370	3920	4200	
42	2740	2980	3460	4010	4300	

BOYS (rounded)						
Weeks ↓	P3	P10	P50	P90	P97	
20	265	285	343	400	420	
21	325	345	419	490	515	
22	375	405	493	580	610	
23	430	465	572	680	710	
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35	1860	2010	2503	2995	3150	
36	1920	2085	2624	3165	3330	
37	2130	2380	2890	3450	3740	
38	2320	2570	3070	3630	3920	
39	2490	2730	3240	3790	4080	
40	2630	2880	3380	3940	4220	
41	2760	3010	3510	4060	4350	
42	2880	3120	3620	4170	4460	