

Online Appendix 1:

Three fetuses with increasing calculated excess cardiac output (XSCO%)

Case 3 (type 1 SCT) was uncomplicated and delivered at term. The VI% rose to 5% as the SCT to fetal weight ratio (SCTratio) increased from 0.03 to 0.12, then stabilized. The high-normal CCOi of 532 mls/min/Kg at 21 weeks fell to 289 mls/min/Kg by term.

Case 7 (type 2 SCT) had an adverse outcome with neonatal demise at 28.8 weeks. The fetus had persistent ascites and small pericardial effusion with VI% of 14.9% and XSCO% rising to 25% by delivery along with a SCTratio increase from 0.13 to 0.33. The CCOi estimation rose to 630 mls/min/Kg at 26.3 weeks, however almost three additional gestational weeks were obtained before delivery because cardiac function was preserved and tumor size had stabilized (SCTratio 0.28). The last estimated CCOi was normal at 337 mls/min/Kg at 28.8 weeks.

Case 10 had a good outcome and was delivered at 32 weeks because of polyhydramnios (AFI of 33) and a rapidly expanding tumor with SCTratio rising from 0.3 at 26.4 weeks to 0.93 by 31.9 weeks. While serial VI% of the SCT decreased from 6.9% to 3.9% during this period, XSCO% rose from 3.6% to 11.7% by 30 weeks, before stabilizing prior to delivery. The CCOi was high-normal at 582 mls/min/Kg for the first two evaluations but subsequently dropped to 353 mls/min/Kg by delivery.