

Ductus Venosus Assessment

Assessment Criteria and Image Scoring Method

Criterion	Definition	Score
Sagittal section	Right ventral mid sagittal view of the fetal abdomen must be obtained.	✓/ x
Magnification	Fetal thorax and abdomen occupy the entire image	✓/ x
Colour flow mapping	Colour flow mapping with appropriate settings and vessel filling should be undertaken to demonstrate the umbilical vein and ductus venosus (aliasing seen at level of the umbilical sinus)	✓/ x
Application of the sampling gate	Pulsed wave Doppler with a gate set at 0.7mm should be placed within the middle of the vessel	✓/ x
Insonation	Ensure that the angle of insonation is ideally zero degrees, however less than 30° will be accepted.	✓/ x
Sweep speed	Four similar consecutive waveforms are obtained to allow accurate assessment of the A-wave.	✓/ x
A-wave assessment	A-wave clearly identified as positive, absent or reversed without contamination of neighbouring vessels	✓/ x

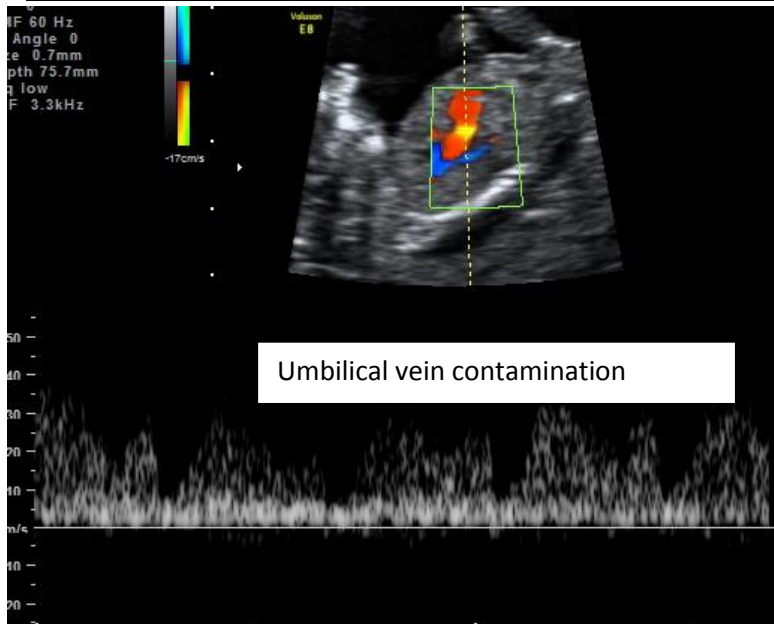
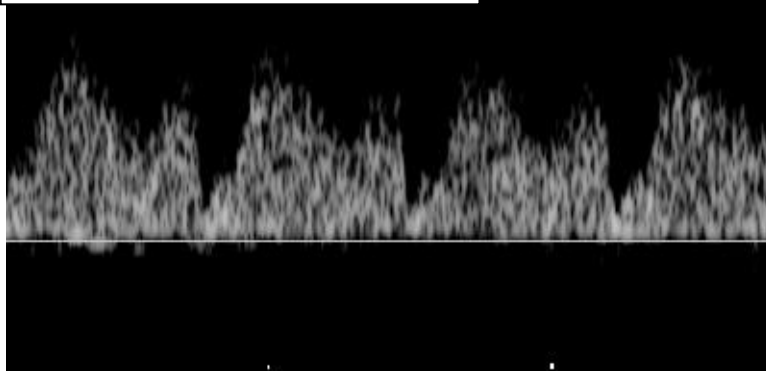
Maximum score of 7.

A score of 5 or more is an acceptable image.

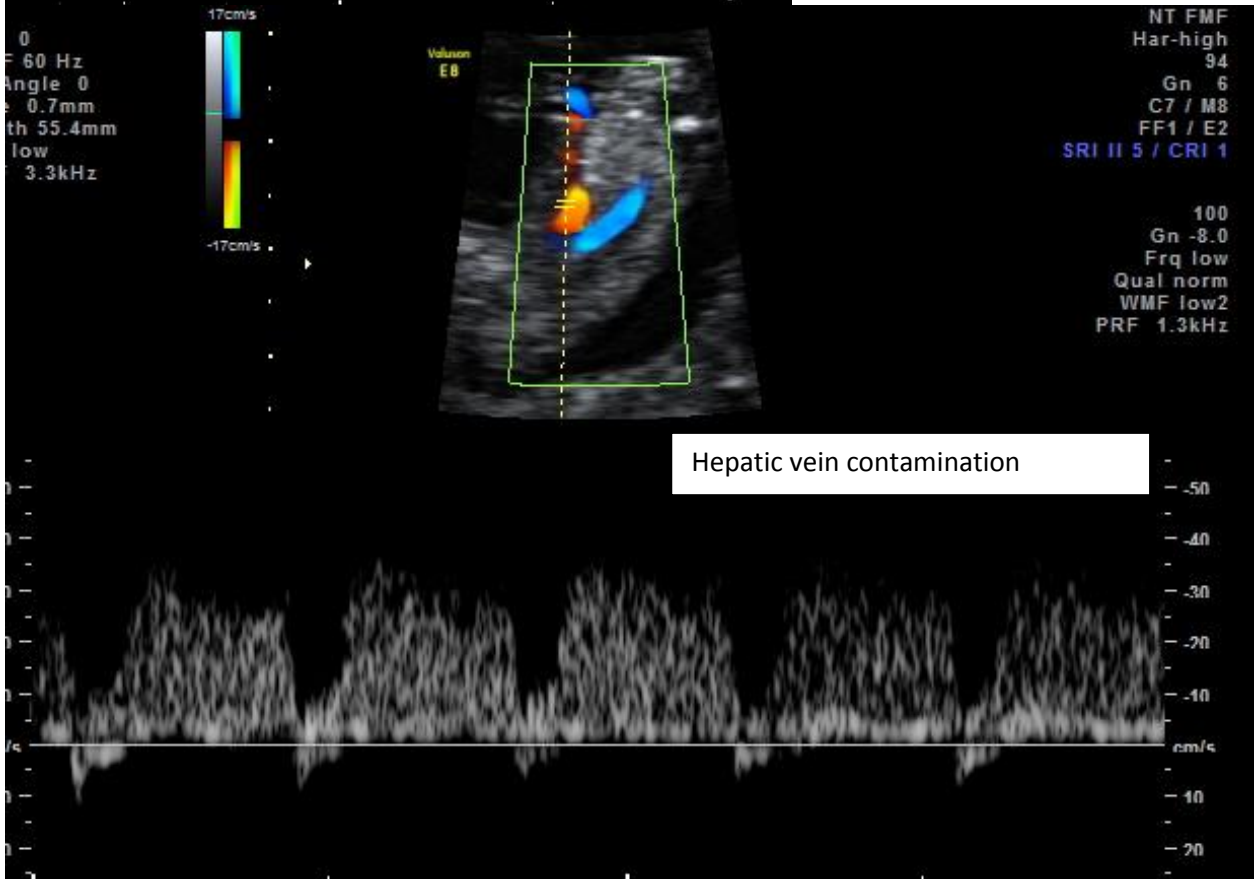
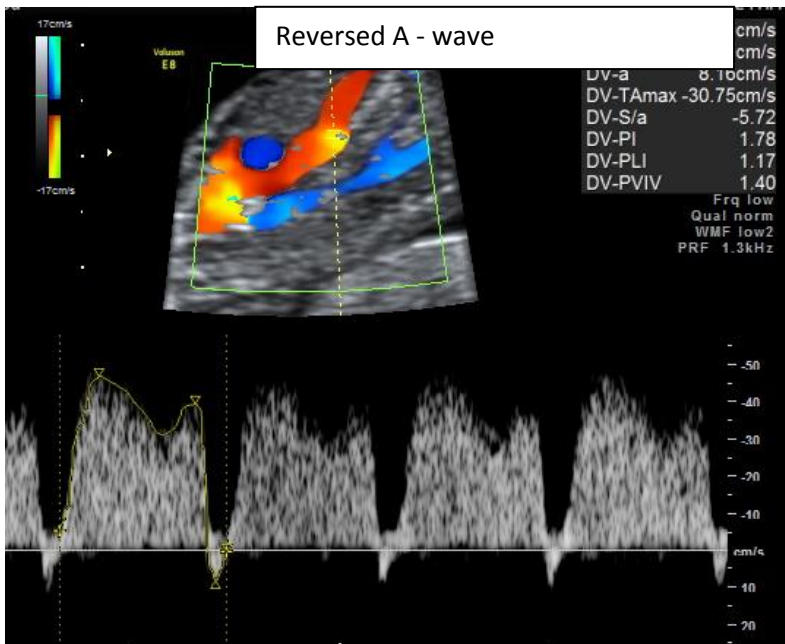
If the A-wave demonstrates neighbouring vessel contamination it will be deemed uninterpretable and image will score zero.



Positive A -wave



Umbilical vein contamination



Hep vein contamination