Fetal Heart Society

Q&A for FHS Webinar: *Advanced Modalities for Assessing Fetal Arrhythmias*

	Question	Answer
1	How often do you encounter 2:1 AV block and how frequently Torsades?	JS: From our paper by Strand, and our experience since that time, we found 2:1 block in 11% of LQT1s, 0% LQT2s, and 60% of LQT3s. Torsade was present in no LQT1s, 38% of LQT2s and 60% of LQT3s. Within the familial group, 11% had Torsades, within the denovo group, 55% had Torsades. *Circ Arrhythm Electrophysiol.* 2020;13:e008082. DOI: 10.1161/CIRCEP.119.008082 • https://www.ahajournals.org/doi/10.1161/CIRCEP.119.008082
2	Who will be performing this new modality? Cardiology Sonographers, OB Sonographers or radiology?	JS: For fMCG it will be fetal cardiologists working within fetal care centers. As the modality becomes more prevalent, MFM's will probably supervise the acquisition and cardiology will read the tracings. AK: For who will be performing the new modality it is still as research but I envision it will be applied by a nurse and interpreted by a cardiologist as with other ECGS.
3	When a patient is doing their own ecg for their baby and hearing the fetus heart beat how do they know what to do?	BC: I will take a stab at this since I think the question is about the monitor. The answers to many of the monitoring questions can be found on the video on stopbloq.org. But in general, the mother is taught what is normal and what is abnormal (FHR >180 or < 100 bpm or irregular rhythm) during her visits with peds cardiology. The cardiologist will also tell her when to call them.
4	Is there a cutoff chart for fetal PR interval as well?	JS: Cuneo et al. *Ultrasound Obstet Gynecol* 2019; **54**: 625–633 has values and references to other articles. • https://obgyn.onlinelibrary.wiley.com/doi/full/10.1002/uog.20245
5	So in SSA positive moms, at what PR interval (on fetal echo) do you worry that the fetus has first degree block and should be monitored more closely or treated to hopefully avoid evolving to second or 3rd degree?	JS: See above. Also, Jaeggi, et al. JACC Vol. 57, No. 13, 2011 • https://www.sciencedirect.com/science/article/pii/S0735109711001896 BC: We do not call first degree unless the AV interval is above what is mentioned in our manuscript above, which in general is 170 ms or greater.

	Question	Answer
6	Is flecainide first line therapy for fetal SVT without hydrops now as compared to digoxin at most institutions? Is there a new standard of care for a particular medication for a particular fetal arrhythmia?	JS: Two articles were published purporting Digoxin's inferiority however they were both under-powered. The randomized controlled FAST trial (**https://www.fasttherapytrial.com/**) will be critical to better understanding the best therapy. I encourage everyone to enroll their cases. The non-hydrops randomization is dig-flecainide-sotalol. • **https://link.springer.com/article/10.1007/s00246010053** • **https://journals.sagepub.com/doi/10.1177/10600280940280090 7?url_ver=Z39.88-2003&rfr_id=ori:rid:crossref.org&rfr_dat=cr_pub%20%200pubmed**
7	When you try to orient the fetal EKG with US, is that continuous scanning?	AK: Our lab typically orients the fetus at the beginning of the study. The other paper from Dr. Vullings group describes that they perform ultrasound to determine position four times during the study.