**Introduction**

Velocity Vector Imaging (VVI) is a new visual and quantitative method for assessing cardiac mechanics. Various motion-related parameters are derived from the computed motion and displayed in a number of ways.

**Aim**

To establish normal values of Strain/Strain rate and Myocardial velocity in the right ventricle of normal and abnormal fetal hearts.

**Material/Methods**

30 cases (10 normal, 20 abnormal) ranging from 20 to 40 weeks. Endocardium was tracked with Siemens S3000 syngo® VVI. The parameters evaluated were STRAIN(%) Strain Rate (sr/s) and Myocardial velocity Displacement (cms/s).

**RESULTS**

Strain, Strain Rate, Myocardial velocity is significantly lower in abnormal hearts (blue) with increased preload or afterload as compared to the normal heart trace (yellow).

**Conclusion**

- Myocardial strain reflects the changing physiology of Fetal CHD.
- Speckle tracking might be a useful tool to study the progress of myocardial function in affected fetuses.
- Strain, Strain Rate and Myocardial Velocities are reduced in various cardiac pathologies.
- Normal and abnormal Strain values have been plotted for future reference.