Diastolic Dysfunction Made EASY!

**MITRAL INFLOW**
Measures BLOOD FLOW coming into the Left Ventricle

- **Grade 0** (Normal)
  - \( E/A > 0.8 \)
  - \( e' > 8 \text{ cm/s} \)
  - \( E/e' < 8 \)

- **Grade 1** (Impaired Relaxation)
  - \( E/A < 0.8 \)
  - \( e' < 8 \text{ cm/s} \)
  - \( E/e' < 8 \)

- **Grade 2** (Pseudonormal)
  - \( E/A > 0.8 \)
  - \( e' < 8 \text{ cm/s} \)
  - \( E/e' 8 - 15 \)

- **Grade 3** (Restrictive)
  - \( E/A > 2 \)
  - \( e' << 8 \text{ cm/s} \)
  - \( E/e' > 15 \)

**TISSUE DOPPLER**
Measures MUSCLE MOVEMENT of the Left Ventricle AWAY from probe during Diastole

- **E/A > 0.8**
- **E/A < 0.8**
- **E/A > 0.8**
- \( E/A > 2 \)

- **Impaired Relaxation & Decreased LV Compliance**
- **Increase in LAP causing more “Push” from LA during Early Filling**
- **Severe increase in LAP causing more “Push” from LA during Early Filling. Also LA enlargement**

**INTERPRETATION:**
- \( e' > 8 \text{ cm/s} \)
- \( e' < 8 \text{ cm/s} \)
- \( e' < 8 \text{ cm/s} \)
- \( e' << 8 \text{ cm/s} \)

**PULSE** Wave gate at Mitral Valve Tips

**TISSUE DOPPLER**
Measures MUSCLE MOVEMENT of the Left Ventricle AWAY from probe during Diastole

- Tissue Doppler gate at Septal Annulus

\( E/A > 0.8 \)
\( E/A < 0.8 \)
\( E/A > 0.8 \)
\( E/A > 2 \)

\( e' > 8 \text{ cm/s} \)
\( e' < 8 \text{ cm/s} \)
\( e' < 8 \text{ cm/s} \)
\( e' << 8 \text{ cm/s} \)