

Heart murmur teaching:

1. Timing: S1/S2, mid/holosystolic, diastolic, continuous
2. Grading:
 - I. Barely audible
 - II. Soft
 - III. Easily audible
 - IV. Easily audible + thrill
 - V. Easily audible+ thrill + lift stethoscope slightly off chest/light pressure
 - VI. Easily audible+ thrill + stethoscope off chest
3. Shape: crescendo, crescendo-decrescendo, uniform
4. Pitch: low (low pressure gradient, best heard with bell), high (large pressure gradient, best heard with diaphragm)
5. Location: Aortic, pulmonary, tricuspid, mitral
6. Radiation: (carotids = typical for AS, left axilla typical for MR, back typical for coarc)

Benign murmur features: (most kids murmurs are not pathologic), vibratory/musical, LLSB, loudest when supine, decrease when stands

Pathologic features: holosystolic, diastolic, grade 3+, harsh, abnormal S2, S3 or S4 present, systolic click, LUSB, increased intensity when standing, abnormal growth