

# Heart Disease and Pregnancy

## Heart Disease and Pregnancy

- Increases risk of maternal mortality
- Need to diagnose early and treat
- Increased risk of spontaneous abortion, pre-term labor, and IUGR for fetus

## Functional Classification of Heart Disease in Pregnancy: Class I

- Asymptomatic – No limitation of physical activity
- No symptoms such as discomfort/angina with ordinary activity
- Ex: mitral insufficiency
- Usually normal pregnancy with few complications

## Functional Classification of Heart Disease in Pregnancy: Class II

- Slight limits to ordinary activity
- Asymptomatic at rest, but with physical activity could be symptomatic: fatigue, dyspnea
- Ex: hx of rheumatic heart disease
- Usually normal pregnancy with few complications

## Functional Classification of Heart Disease in Pregnancy: Class III

- Moderate limitations with activity
- Asymptomatic at rest but fatigue, dyspnea, and/or angina, palpitations with activity
- Ex: Unstable angina, coronary artery disease
- At risk for severe complications in pregnancy

## Functional Classification of Heart Disease in Pregnancy: Class IV

- Unable to carry on any physical activity without symptoms
- Symptomatic at rest: angina, CHF symptoms
- Discomfort increased with any physical activity
- Ex: heart tumor
- At risk for severe complications in pregnancy

## Antepartal care

- Goal: maintain balance between cardiac reserve and cardiac workload
- Diet: Cardiac, low sodium, high iron, adequate nutrients
- Rest: when needed and symptomatic
- Avoid illness
- Restrict weight Gain
- Frequency of OB visits: more often (could be every 2 weeks depending on class in beginning of pregnancy)

## Cardiac Pharmacologic Therapy

- Multivitamins with Iron – prevention of anemia
- Antibiotics – prevention of endocarditis if patient had hx of valvular damage
- Heparin – does not cross placenta, prevention of coagulation problems
- Lasix and thiazide diuretics -treatment or prevention of CHF
- Digoxin– prevention of arrhythmias

## Intrapartum Goals & Care

- Fetus: adequate O2 and blood supply to fetus (EFM)
- Mother: reduce physical exertion and fatigue, rest periods
- Observe for signs of CHF
- Position: side lying, semi fowlers best
- Oxygen by mask as needed
- Medications during labor: Diuretics -Antibiotics - Analgesics -
- Pushing instructions: short moderate pushes with rest
- May need epidural and delivery assistance

**Plan of care: Labor and Birth**

- Class I and II: Natural labor
- Class III and IV: Cardiac stabilization may have labor induced
- Safest delivery is the goal!
- Low forceps with epidural
- C-Section for maternal/fetal complications

**Post-Partum Period**

- Most critical time period- first 24-48 hours post-partum
- Monitor for cardiac decompensation
- Extravascular fluid returns to bloodstream- can strain the heart further
- CO and blood volume increase
- May lead to exacerbation HF

**Management during post-partum period:**

- Frequent assessments and monitoring
- Semi fowlers position, elevated HOB
- Gradually progress activity
- Appropriate diet
- Stool softeners
- Encourage/promote breastfeeding
- Discharge teaching