

Pregnant Cardiac Patient Interventions

The management of the pregnant cardiac client is focused on minimizing stress on the heart, which typically occurs at 28-32 weeks, when blood volume and other hemodynamic changes are at a peak during the pregnancy. The focus of management during labor and birth is on promoting cardiac function and decreasing anxiety.



PLAY PICMONIC

Prenatal

Monitor for Cardiac Decompensation

Monitor for Heart Decomposed

The pregnant woman with cardiac issues should be monitored for cardiac decompensation. This includes assessing edema, heart rate and feeling of palpitations, blood pressure, cardiac output, weight gain, increasing fatigue, frequent cough, and crackles in the lungs.

Stool Softener

Stool with Soft-serve

A stool softener should be considered in order to avoid the pregnant woman from straining during defecation and producing a Valsalva maneuver. This straining, when released, causes a fast influx of blood into the heart, which will overload the pregnant woman's heart.

Calcium Channel Blockers

Calcium-cow Channel with Blocks

Calcium channel blockers may help the pregnant woman's heart work more efficiently by decreasing the workload on the heart. However calcium channel blockers will decrease the blood pressure, so the pregnant patient must be watched for hypotension. Hypotension will result in decreased blood flow to the fetus.

Labor

ECG Monitor

ECG Monitoring

The pregnant woman should be placed on an ECG monitor to assess for tachycardia, a pulse greater than 100 bpm, and the woman should be assessed for irregular rhythms that may signify increased stress and work of the heart.

Open Glottis Pushing

Open Glottis-goddess Pushing

The patient should avoid the Valsalva maneuver during pushing, which is esentially pushing while holding your breath. This is because the Valsalva maneuver reduces diastolic ventricular filling and obstructs left ventricular outflow. Instead open glottis pushing should be used, which is pushing while expelling air through the mouth simultaneously.



Pulmonary Artery Catheter

Lungs Catheter-cat

A pulmonary artery catheter may be inserted into the pregnant woman in order to carefully monitor the pressures within the pulmonary artery to assess for any hemodynamic changes.

No Beta-Adrenergic Medications

No Beta-fish in Medication-bottle

The pregnant woman with cardiac issues should not be administered beta adrenergic agents, such as terbutaline as these agents may result in a further increased heart rate and irregularity as well as pulmonary edema and myocardial infarctions.

Penicillin Prophylaxis

Pencil-villain and Purple-axes

The pregnant woman with cardiac issues should be placed on prophylactic penicillin to prevent bacterial endocarditis. Labor increases that chances of the woman developing an infection and because of underlying cardiac issues, an infection could not only add extra stress on the heart but an infection could spread to the heart resulting in endocarditis.

Postpartum

Stress on Heart

Stressed Heart

After birth of the fetus, cardiac output rapidly increases due to fluid quickly returning to the vasculature and a decrease in abdominal pressures. This increased flow to the heart causes increased stress on the heart and can quickly lead to cardiac decompensation. Position the woman with the head of the bed elevated and rotate to her side to decrease stress on the heart.