

CARDIAC PRECAUTIONS

1) Monitor Vital Signs

A) Heart Rate (HR) Normal response: increases with exertion. Rest patient when it has increased 20 beats per minute more than resting heart rate (RHR).

Note: Count for 10 seconds and multiply by 6 to monitor HR with exercise. If counting for a whole minute you would get an average of the HR during exercise and as it slowed down to return to normal.

Abnormal response: extremely rapid (over 120 bpm; becomes irregular. See if there is a pattern to the irregularity.)

Note: Pacemakers regulate HR. If present check to see if it has a set rate or if it works only when needed. (One with a set rate may limit patient's cardiopulmonary ability to adaptive to exercise.)

B) Blood Pressure (BP) Normal response: increase with exercise. Abnormal response: decrease with exercise. Diastole increases or decreases over 10 mm Hg during exercise. Diastole should never get over 90 or under 50.

Note: BP is not a good indicator of response to exercise if patient is taking medication to artificially suppress it.

2) Avoid strenuous exercise right after eating. Wait 1 hour after eating to offer therapy. Wait 2 hours after eating a particularly heavy meal.

Note: The digestive system is putting a great demand on the circulatory system at this time.

3) Offer warm-up exercises (non-resistive) before starting resistive exercises.

Note: The heart rate increases to meet the need for increased oxygen by the muscles when exercise first starts. After 1-2 minutes, the respiratory system adjusts itself to meet the increased needs by increasing the respiratory rate.

4) Avoid valsalva maneuvers (holding breath while straining as a means to maximize power/strength)

Note: The tension in the muscles slows circulation depriving the heart of venous return, then when the muscle relaxes, the freed blood rushes back to the heart all at once, causing it to become engorged and forcing it to strain.

Have patient use coordinated breathing and strain on the exhale part of the cycle or have patient count or talk while working to assure proper air exchange.

5) Observe Patient for symptoms: Weakness, chest pain/numbness, dizziness, diaphoresis, flushing or blanching of skin

6) Be familiar with patient's "normal" HR and BP and physical limitations. Record unusual changes. Notify nursing if they do not resolve after allowing the patient to rest.