NURSING CARE PLAN 34-1

Patient with Acute Coronary Syndrome

NURSING DIAGNOSIS **Acute pain** *related to* myocardial ischemia *as evidenced by* severe chest pain and tightness, radiation of pain to the neck and arms

PATIENT GOAL Reports relief of pain

OUTCOMES (NOC)

Pain Level

- Reported pain ____

Measurement Scale

1 = Severe
2 = Substantial
3 = Moderate
4 = Mild
5 = None

Pain Control

- Uses preventive measures ____
- Uses analgesics appropriately ____
- Reports uncontrolled symptoms to health care professional ____
- Reports pain controlled ____

Measurement Scale

1 = Never demonstrated
2 = Rarely demonstrated
3 = Sometimes demonstrated
4 = Often demonstrated
5 = Consistently demonstrated

INTERVENTIONS (NIC) and *RATIONALES*

Cardiac Care: Acute

- Evaluate chest pain (e.g., intensity, location, radiation, duration, and precipitating and alleviating factors) *in order to accurately evaluate, treat, and prevent further ischemia.*
- Monitor effectiveness of oxygen therapy *to increase oxygenation of myocardial tissue and prevent further ischemia.*
- Administer medications to relieve/prevent pain and ischemia *to decrease anxiety and cardiac workload.*
- Obtain 12-lead ECG *during pain episode to help differentiate angina from extension of MI or pericarditis.*
- Monitor cardiac rhythm and rate and trends in blood pressure and hemodynamic parameters (e.g., central venous pressure and pulmonary artery wedge pressure) *to monitor for hypotension and bradycardia, which may lead to hypoperfusion.*

NURSING DIAGNOSIS **Ineffective tissue perfusion (cardiac)** *related to* myocardial injury and potential pulmonary congestion *as evidenced by* decrease in BP, dyspnea, dysrhythmias, peripheral edema, and oliguria

PATIENT GOAL Maintains stable signs of effective cardiac perfusion

OUTCOMES (NOC)

Cardiac Pump Effectiveness

- Systolic blood pressure ____
- Diastolic blood pressure ____
- Apical heart rate ____
- Urinary output ____

Measurement Scale

1 = Severely compromised
2 = Substantially compromised
3 = Moderately compromised
4 = Mildly compromised
5 = Not compromised

- Peripheral edema ____
- Dyspnea ____
- Dysrhythmia ____

Measurement Scale

1 = Severe
2 = Substantial
3 = Moderate
4 = Mild
5 = None

INTERVENTIONS (NIC) and *RATIONALES*

Cardiac Care

- Monitor vital signs frequently *to determine baseline and ongoing changes.*
- Monitor for cardiac dysrhythmias, including disturbances of both rhythm and conduction, *to identify and treat significant dysrhythmias.*
- Monitor respiratory status for symptoms of heart failure *to maintain appropriate levels of oxygenation and observe for signs of pulmonary edema.*
- Monitor fluid balance (e.g., intake/output, daily weight) *to monitor renal perfusion and observe for fluid retention.*
- Arrange exercise and rest periods *to avoid fatigue and decrease the oxygen demand on myocardium.*

Continued

NURSING CARE PLAN 34-1—cont'd

Patient with Acute Coronary Syndrome—cont'd

NURSING DIAGNOSIS **Anxiety** *related to* perceived or actual threat of death, pain, possible lifestyle changes *as evidenced by* restlessness, agitation, and verbalization of concern over lifestyle changes and prognosis as substantiated by patient's statement of "What is going to happen when I die … everyone relies on me"

PATIENT GOAL Reports decreased anxiety and increased sense of self-control

OUTCOMES (NOC)

Anxiety Self-Control

- Monitors intensity of anxiety ____
- Seeks information to reduce anxiety ____
- Controls anxiety response ____
- Uses relaxation techniques to reduce anxiety ____

Measurement Scale

1 = Never demonstrated
2 = Rarely demonstrated
3 = Sometimes demonstrated
4 = Often demonstrated
5 = Consistently demonstrated

INTERVENTIONS (NIC) and *RATIONALES*

Anxiety Reduction

- Observe for verbal and nonverbal signs of anxiety.
- Identify when level of anxiety changes *since anxiety increases the need for oxygen.*
- Use a calm, reassuring approach *so as not to increase patient's anxiety.*
- Instruct patient in use of relaxation techniques (e.g., relaxation breathing, imagery) *to enhance self-control.*
- Encourage family to stay with patient *to provide comfort.*
- Encourage verbalization of feelings, perceptions, and fears *to decrease anxiety and stress.*
- Provide factual information concerning diagnosis, treatment, and prognosis *to decrease fear of the unknown.*

NURSING DIAGNOSIS **Activity intolerance** *related to* fatigue secondary to decreased cardiac output and poor lung and tissue perfusion *as evidenced by* fatigue with minimal activity, inability to care for self without dyspnea, and increased heart rate

PATIENT GOAL Achieves a realistic program of activity that balances physical activity with energy-conserving activities

OUTCOMES (NOC)

Energy Conservation

- Balances activity and rest ____
- Recognizes energy limitations ____
- Uses energy conservation techniques ____

Measurement Scale

1 = Never demonstrated
2 = Rarely demonstrated
3 = Sometimes demonstrated
4 = Often demonstrated
5 = Consistently demonstrated

Activity Tolerance

- Oxygen saturation with activity ____
- Pulse rate with activity ____
- Ease of breathing with activity ____

Measurement Scale

1 = Severely compromised
2 = Substantially compromised
3 = Moderately compromised
4 = Mildly compromised
5 = Not compromised

INTERVENTIONS (NIC) and *RATIONALES*

Cardiac Care

- Monitor patient's response to antiarrhythmic medications *since these medications will affect BP and pulse prior to activity.*
- Arrange exercise and rest periods to avoid fatigue and *to increase activity tolerance without rapidly increasing cardiac workload.*

Energy Management

- Assist patient to understand energy conservation principles (e.g., the requirement for restricted activity) *to conserve energy and promote healing.*
- Teach patient and significant other techniques of self-care that will minimize oxygen consumption (e.g., self-monitoring and pacing techniques for performance of activities of daily living) *to promote independence as well as minimize O_2 consumption.*

Adhering to a regular, individualized program of physical activity that conditions the heart rather than overstresses the myocardium is important. Most patients can be advised to walk briskly on a flat surface at least 30 minutes a day, 5 or more days a week.[8]

It is important to teach the patient and the family in the proper use of nitroglycerin (see pp. 000). Nitroglycerin tablets or ointments may be used prophylactically before an emotionally stressful situation, sexual intercourse, or physical exertion (e.g., climbing a long flight of stairs).

Counseling should be provided to assess the psychologic adjustment of the patient and the family to the diagnosis of CAD and the resulting angina. Many patients feel a threat to their identity and self-esteem and may be unable to fill their usual roles in society. These emotions are normal and real.

■ *Nursing Implementation*

■ *Acute Coronary Syndrome*

Acute Intervention. Priorities for nursing interventions in the initial phase of ACS include pain assessment and relief, physiologic monitoring, promotion of rest and comfort, alleviation of stress and anxiety, and understanding of the patient's emotional

NURSING CARE PLAN 34-1—cont'd

Patient with Acute Coronary Syndrome—cont'd

NURSING DIAGNOSIS **Ineffective therapeutic regimen management** *related to* lack of knowledge of risk factors, disease process, rehabilitation, home activities, and medications *as evidenced by* frequent questioning about illness, management, and care after discharge

PATIENT GOAL Describes risk factors, the disease process, and rehabilitation activities necessary to manage the therapeutic regimen

OUTCOMES (NOC)

Knowledge: Cardiac Disease Management

- Description of usual course of disease process ____
- Description of symptoms of worsening disease ____
- Description of ways to manage controllable risk factors ____
- Description of importance of completing recommended cardiac rehabilitation program ____
- Description of energy conservation techniques ____
- Description of effects of medications ____
- Description of options in assistance with medical emergencies ____

Measurement Scale

1 = None
2 = Limited
3 = Moderate
4 = Substantial
5 = Extensive

INTERVENTIONS (NIC) and *RATIONALES*

Teaching: Disease Process

- Appraise the patient's current level of knowledge related to myocardial infarction *to obtain information on patient's teaching needs.*
- Explain the pathophysiology of the disease and how it relates to anatomy and physiology *to individualize the information and to increase understanding.*
- Discuss lifestyle changes that may be required to prevent further complications and/or control disease process *to get the cooperation of the patient's significant support system.*
- Refer the patient to local community agencies/support groups *so that the patient and family have resources and support available.*

Teaching: Prescribed Medication

- Instruct the patient on the purpose and action of each medication.
- Instruct the patient on the dosage, route, and duration of each medication *so that patient understands the reason for taking the medication and will be less likely to refuse to take medications.*

and behavioral reactions. Research has shown that patients with increased anxiety levels have a greater risk for adverse outcomes such as recurrent ischemic events and dysrhythmias.[48] Proper management of these priorities decreases the oxygen needs of a compromised myocardium and reduces the risk of complications. In addition, the nurse should institute measures to avoid the hazards of immobility while encouraging rest.

Pain. Nitroglycerin, morphine sulfate, and supplemental oxygen should be provided as needed to eliminate or reduce chest pain. Ongoing evaluation and documentation of the effectiveness of the interventions is important. Once pain is relieved, the nurse may have to deal with denial in a patient who interprets the absence of pain as an absence of cardiac disease.

Monitoring. A patient has continuous ECG monitoring while in the ED and intensive care unit and usually after transfer to a step-down or general unit. The nurse should be educated in ECG interpretation so that dysrhythmias causing further deterioration of the cardiovascular status can be identified and treated. During the initial period after MI, ventricular fibrillation is the most common lethal dysrhythmia. In many patients, this dysrhythmia is preceded by premature ventricular contractions or ventricular tachycardia. The nurse should also monitor the patient for the presence of silent ischemia by monitoring the S-T segment for shifts above or below the baseline of the ECG. Silent ischemia occurs without clinical symptoms such as chest pain, but its presence places a patient at higher risk for adverse outcomes and even death.[48] If episodes of silent ischemia are seen on the monitor, the physician should be notified. (See Chapter 36 for a complete discussion of ECG monitoring.)

In addition to frequent vital signs, intake and output should be evaluated at least once a shift, and physical assessment should be carried out to detect deviations from the patient's baseline parameters. Included is an assessment of lung sounds and heart sounds and inspection for evidence of early HF (e.g., dyspnea, tachycardia, pulmonary congestion, distended neck veins).

Assessment of the patient's oxygenation status is important, especially if the patient is receiving oxygen. Also, the nares should be checked for irritation or dryness, which can cause considerable discomfort if the nasal route is used for oxygen administration.

Rest and Comfort. With a severe insult to the myocardium, as in the case of ACS, it is important for the nurse to promote rest and comfort. Bed rest may be ordered for the first few days after an MI involving a large portion of the ventricle. A patient with an uncomplicated MI (e.g., angina resolved, no signs of complications) may rest in a chair within 8 to 12 hours after the event. The use of a commode or bedpan is based on patient preference.

When sleeping or resting, the body requires less work from the heart than it does when active. It is important to plan nursing and therapeutic actions to ensure adequate rest periods free from interruption. Comfort measures that can promote rest include frequent oral care, adequate warmth, a quiet atmosphere, use of relaxation therapy (e.g., guided imagery), and assurance that personnel are nearby and responsive to the patient's needs.

It is important that the patient understand the reasons why activity is limited. However, in spite of this limitation, the patient is not completely restricted. Gradually the cardiac workload is increased through more demanding physical tasks so that the patient