

CARE OF OLDER PERSON WITH CIRCULATION PROBLEMS

Hilario
Lacson
Layague
Lapitan

CARE OF OLDER PERSON WITH CIRCULATION PROBLEMS

As people age, their cardiovascular system undergoes changes that can lead to problems like heart failure and hypertension. One major issue is the decreased functional reserve, making older adults more prone to chronic diseases. For instance, the heart's ability to pump blood can decline due to reduced blood supply and stiffer blood vessels, which can lead to heart failure.

Additionally, the risk of developing hypertension increases with age, often caused by vasoconstriction - the narrowing of blood vessels. This can lead to high blood pressure, a common issue among older adults.

CARDIOVASCULAR PROBLEMS

Congestive Heart Failure (CHF) is a common issue among older adults, often caused by age-related changes like stiffer and narrower blood vessels, and increased blood pressure that disrupts blood flow to the heart.

Coronary Artery Disease (CAD), also known as ischemic heart disease, occurs when the heart muscle doesn't get enough oxygen due to reduced blood supply.

Myocardial Infarction (MI), commonly known as a heart attack, happens when blood flow to part of the heart is blocked, often due to a clogged artery.

PERIPHERAL VASCULAR DISEASE

Elderly people often experience leg pain or discomfort, and upon inspection, prominent, twisted veins become noticeable. These varicose veins can significantly impact mobility and daily functioning, leading to complications like blood clots or ulcers if left untreated. Factors contributing to varicose veins include weakened blood vessel walls, genetics, and prolonged standing or sitting. Symptoms may include aching, swelling, or heaviness in the legs. Treatment options range from lifestyle changes like exercise and elevation to medical procedures for more severe cases.

PERIPHERAL VASCULAR DISEASE

Diabetic older adults are more prone to peripheral vascular issues, which can lead to complications. Common symptoms include:

- Arterial insufficiency: poor circulation causing numbness in the lower legs
- Rest pain or intermittent claudication: calf pain when walking

These symptoms can indicate serious underlying issues, like peripheral artery disease (PAD).

- Varicose veins are associated with loss of vessel elasticity and strength due to the aging process.
- Contributing factors include lack of exercise and activities that entail a great deal of standing.
- There may be dull pain and cramping of the legs.
- These may interfere with rest and sleep of older persons.
- - Dizziness may occur as the patient rises from a lying position because blood is localized in the lower extremities and cerebral circulation is reduced.

HYPERTENSION

- Hypertension is the term used when a person's blood pressure remains persistently elevated.
- This condition forces the heart to pump with greater effort and negatively affects cardiovascular health.
- Over time, structural changes occur in the arteries, leading to increased blood pressure levels.
- Fat and cholesterol deposits, known as cholesterol plaques, gradually build up along the arterial walls.

HYPERTENSION

- The buildup of plaques and excess fluid compresses the arteries, narrowing the lumen (inner diameter) or potentially causing blockage.
- Blood flow may also be limited when the arterial walls thicken, reducing elasticity and making them less flexible or “stretchable.”
- There is no single identified cause of hypertension, but certain individuals have a higher risk of developing it.

HYPERTENSION

- Hypertension is associated with both non-modifiable and modifiable risk factors.
- Modifiable risk factors include the presence of diabetes, cigarette smoking, and lifestyle-related factors such as physical inactivity, obesity, excessive salt intake, and stress.

HYPERTENSION

- Hypertension commonly appears in two main forms:
- **Primary or Essential Hypertension** - the most prevalent type. Its exact cause is unknown, and there is no specific cure; however, it can be effectively managed through early detection and proper treatment.
- **Secondary Hypertension** - a type with an identifiable cause. It may result from adrenal gland tumors, hormonal imbalances, or kidney disorders. Management focuses on treating the underlying condition.

HYPERTENSION

- **Hypertension** is known as the “silent killer.” The increasing blood pressure often goes undetected, with no signs and symptoms felt.
- When the blood pressure has been consistently high for some time, even years, the following may be reported:
 - Dull headache
 - Nape pain (neck pain)
 - Dizziness when rising
 - Epistaxis (nose bleeding)
 - Irritability

STROKE

- Various disorders of the cerebrovascular system can disrupt normal blood circulation to brain tissues.
- Blood vessels within the brain may become narrowed, blocked, or may rupture.
- The effects of these conditions differ based on their location and severity. Ischemia (reduced oxygen supply), hemorrhage, or increased pressure on surrounding brain tissue can lead to anoxia (lack of oxygen) and infarction of brain tissue.
- The primary cerebrovascular conditions that cause disease include brain attacks (stroke), cerebral aneurysms, and arteriovenous malformations

STROKE

- The term cerebrovascular accident (CVA) was commonly used in the past to describe stroke.
- A brain attack refers to a sudden onset of localized neurological deficits caused by an interruption of blood flow to the brain and is considered a medical emergency.

STROKE

Stroke generally occurs in two main types:

- Ischemic Stroke - caused by blockage of one or more blood vessels in the brain due to a thrombus (a clot formed from plaque or fatty deposits within the vessels) or an embolus (a clot that has traveled from another location).
- Hemorrhagic Stroke - occurs when a blood vessel in the brain ruptures, leading to bleeding within the brain tissue.

WARNING SIGNS OF IMPENDING STROKE

- Sudden blurred vision or loss of vision in one or both eyes
- Sudden numbness, weakness, or paralysis of the face, arm, or leg on one or both sides of the body
- Difficulty speaking or understanding speech
- Dizziness, loss of balance, or an unexplained fall
- Difficulty swallowing or unexplained choking
- A sudden, severe headache with no known cause

DIABETES MELLITUS

- Diabetes Mellitus (DM) is the most common problem associated with disorders of the endocrine pancreas. DM is characterized by derangement in carbohydrate, fat and protein metabolism.
- This is associated with inadequate supply and/or inadequate effect of insulin. The condition is characterized by hyperglycemia (abnormally high levels of blood glucose or sugar)

DIABETES MELLITUS

There are two types of diabetes:

- **Type I diabetes**, or Insulin Dependent Diabetes Mellitus (IDDM) is more common in young individuals. This occurs when the person is unable to produce a sufficient supply of insulin to meet bodily needs.
- **Type II diabetes**, or Non-Insulin Dependent Diabetes Mellitus (NIDDM) is the more common form. This is characterized by fasting hyperglycemia despite availability of insulin. It also represents a serious threat, the chronic complications related to vision, circulation and neurological and urinary functions are superimposed on the body systems already experiencing age-related changes.

ASSESSING THE CIRCULATION STATUS OF OLDER PERSONS

- Monitoring several signs of cardiovascular function can help detect problems at an early stage. Assessment should include observation of the following:
 - General appearance, level of alertness, and the color of the skin and nails
 - Energy level, presence of fatigue, and the degree of activity the person can tolerate
 - Breathing pattern, including respiration during walking, changing positions, or speaking
 - Condition of blood vessels, particularly in the neck area, noting whether they are visible, prominent, or not

ASSESSING THE CIRCULATION STATUS OF OLDER PERSONS

- Presence of edema, especially swelling in the ankles
- Extremities: comparison of pulse symmetry, skin temperature, and skin color. The legs should be examined for discoloration, hair thinning or loss, edema, dry or scaly skin, pallor, and lesions. Nail inspection may reveal thickening or dryness related to cardiovascular disorders. Skin temperature can be evaluated by touching different surface areas
- Heart rate, noting whether it is within the normal range (60–100 beats per minute), increased, or decreased
- Blood pressure (BP) measurement to identify elevation or postural hypotension (a change of 20 mmHg or more is considered significant)

ASSESSING THE CIRCULATION STATUS OF OLDER PERSONS

- Peripheral pulses: pulses should be palpated bilaterally to assess rate, rhythm, and strength. Pulse strength is graded on a scale of 0 to 4:
 - o 0 = absent pulse
 - o 1 = weak or thready pulse, easily obliterated
 - o 2 = diminished pulse, difficult to feel and easily compressed
 - o 3 = normal pulse
 - o 4 = strong, bounding pulse that is not easily compressed

ASSESSING THE CIRCULATION STATUS OF OLDER PERSONS

For Hypertension:

- Urinalysis
- Blood tests, including:
 - o Fasting Blood Sugar (FBS)
 - o Serum creatinine and Blood Urea Nitrogen (BUN)
 - o Serum potassium
 - o Lipid profile (total cholesterol, HDL, LDL, triglycerides)
 - o Uric acid

DIAGNOSTIC TEST

For Hypertension:

1. Urinalysis
2. Blood Examinations
 - Fasting Blood Sugar (FBS)
 - Serum Creatinine, Blood Urea Nitrogen (BUN)
 - o Serum Potassium
 - Cholesterol profile (Total, HDL, LDL, Triglycerides)
 - Uric Acid

For Stroke:

- Computerized Tomography
- Magnetic Resonance Imaging (MRI)
- Position Emission Tomography

DIAGNOSTIC TESTS

For Diabetes Mellitus:

Older adults with diabetes often develop increased insulin resistance even in the absence of obesity. Fasting blood sugar levels tend to rise gradually. Common early signs of diabetes include:

- Frequent urination and excessive thirst, caused by glucose drawing water into the urine
- Weight loss, resulting from the breakdown of muscle tissue
- Blurred vision, due to the effects of elevated blood glucose levels on the eyes

PLAN OF CARE

- For the majority of elderly people, adopting a healthier lifestyle may seem like a challenging undertaking. The health professional will need to comprehend their lifelong habits.
- It may be necessary to alter the standard approaches used for younger people with hypertension. Correcting misconceptions about the health advantages of a prescribed diet or structured exercise may be challenging for the health professional. Elderly people may believe they are "too old" to make changes.

PLAN OF CARE

- This is the point at which family participation becomes crucial. A good plan is enhanced by the family's support system. As a result, the patient and their family should be informed about the care plan.
- There could be a lot of long-term issues with care. Consider the following:
 - A change in cardiac output
 - Reduced perfusion of peripheral tissues
 - Lack of Knowledge
 - Failure to stick to a treatment plan

PLAN OF CARE

The health worker can develop the following goals based on the issues.

- To encourage the body's proper blood circulation
- To keep an eye on vital signs and make the necessary recommendations
- To educate patients and their families about the illness and the course of treatment.
- To help the elderly person start exercising as directed.

CARING FOR OLDER PERSONS WITH CIRCULATION PROBLEMS

The interventions listed below complement one another and aim to help the older persons adopt strategies to maintain health.

1. Maintain desired body weight, and lose weight if overweight.

- If an older person's weight is above the desired body weight, there are several consequences. The body stores for fat and cholesterol may increase.

As the body

weight increase, blood pressure tends to rise. Also, overweight persons are more likely to have diabetes. There is an additive effect to these risk factors.

CARING FOR OLDER PERSONS WITH CIRCULATION PROBLEMS

2. Continue eating a diet low in sodium and cholesterol.

- Elderly individuals may find it easier to accept dietary modifications if they arrange their meals carefully. Planning benefits from evaluations of the physical state, eating habits, and cultural norms. Food preferences can vary due to tooth loss and altered taste perception.
- Select foods that are low in cholesterol.
- Refrain from consuming too much fat and sodium.
- Make sure your diet contains enough fiber.
- Carefully plan meals to incorporate special delights like ice cream cakes.
- Steer clear of fasting and crash diets when trying to lose weight.

CARING FOR OLDER PERSONS WITH CIRCULATION PROBLEMS

Reducing salt in the diet

- Use seasonings like patis, bagoong, and soy sauce, as well as minimal or no table salt.
- When cooking, use less salt.
- Steer clear of foods heavy in sodium (salt), such as canned goods, processed meats (tocino), salted fish (daing), and salty snacks.
- Select foods marked "with no added salt" by looking at their labels.

CARING FOR OLDER PERSONS WITH CIRCULATION PROBLEMS

3. Have a regular prescribed exercise program

- Regular exercise can help in weight reduction. But it is important to plan for the exercise program. For an older person who has poorly controlled diabetes, a sudden increase in physical activity can be harmful. Blood sugar has to be stabilized and brought under control before gradually increasing physical activity.
- For older persons with NIDDM, exercise can enhance emotional well-being and physiologic function, such as reduction in blood glucose levels, improves circulation, and increase in physical stamina.

CARING FOR OLDER PERSONS WITH CIRCULATION PROBLEMS

4. Stop Smoking

- Over time, smoking can raise blood pressure because it destroys and narrows blood vessels.

5. Maintain emotional and Social health

- Physical health is associated with social and emotional well-being. For instance, a lot of persons with emotional or social problems like anger, aggression, or self-repression also have high blood pressure, which is a physical health issue. The elderly person must be motivated to maintain all facets of their health in order to attain wellbeing.

CARING FOR OLDER PERSONS WITH CIRCULATION PROBLEMS

6. Manage Stress

- Prolonged and excessive stress can typically raise blood pressure and heart rate. Here's a useful strategy to assist senior citizens in stress management:
- **Stop** - Before your thoughts worsen, stop whenever tension becomes too much to handle.
- **Take deep breaths** - to ease muscular stress. Refocusing thoughts and getting enough air can be achieved by taking three to four deep breaths. Breathing is frequently shallow and brief when under stress. The person feels healthier and more energized when they obtain more air. Warn the client not to overdo it.

CARING FOR OLDER PERSONS WITH CIRCULATION PROBLEMS

6. Manage Stress

- **Reflect** - Focus on the problem at hand, and what causes the stress. Older persons may want to talk about stress. The family member and the health worker must be ready to listen.
- **Choose** - Choose specific ways to deal with the stress. Talking about it helps. The use of imagery can also be encouraged. Others have used this in combination with soft music.

MEDICATION ADMINISTRATION

After assessment, physicians diagnose and prescribe medications. Caregivers assist by giving medications, teaching proper intake, and monitoring for side effects and adverse reactions.

Medication Administration Guidelines for Older Persons

- Provide clear information about the drug name, purpose, dosage, schedule, interactions, and side effects.
- Check the person's weight to help determine the correct dose.
- Identify any drug allergies before giving medications.
- Store medications in tightly closed, light-resistant containers.
- Inform the physician if the older person is taking multiple drugs, as polypharmacy is common and increases

MEDICATION ADMINISTRATION

Anti-Hypertensive Drugs

- Take medications daily as prescribed; do not double doses if one is missed.
- Do not stop medications abruptly or when blood pressure appears normal.
- Monitor for dizziness or drowsiness, especially at the start, and report unusual effects.
- Avoid sudden position changes, alcohol, and excessive heat, as these can lower blood pressure further.

Oral Hypoglycemics and Insulin (Diabetes)

- Oral medications are used when diet and exercise are insufficient.
- Warn older persons about possible hypoglycemia.
- Insulin therapy aims to maintain normal blood glucose and requires correct dosing, proper injection technique, site rotation, and safe syringe disposal.

PREVENTING COMPLICATIONS OF CARDIOVASCULAR CONDITIONS

Edema refers to noticeable swelling caused by abnormal fluid buildup in the spaces between body cells, also known as dropsy. In patients with heart failure, it commonly begins in the lower extremities. The following measures can help manage edema:

- Reposition the patient regularly
- Maintain proper body alignment with adequate support
- Prevent arms and legs from hanging over the sides of the bed or chair
- Protect pressure areas by padding and gently massaging them
- Inspect clothing to ensure it is not too tight or restrictive
- Monitor body weight, limb size, and abdominal circumference to track changes in swelling
- Observe and record fluid intake and output, and adhere to prescribed fluid restrictions

PREVENTING COMPLICATIONS OF CARDIOVASCULAR CONDITIONS

Temperature Assessment. Changes in body temperature may indicate the presence of an infection. Older adults often have a naturally lower body temperature compared to younger individuals, making it essential to document the patient's usual temperature as a reference point for accurate evaluation.

Blood Pressure Changes. Elevated blood pressure is linked to decreased carbon dioxide levels and blood vessel dilation. Low blood pressure, or readings below the patient's normal level, can lead to poor circulation that fails to meet the body's demands. Signs such as dizziness and confusion may suggest reduced blood flow to the brain caused by a drop in blood pressure.

PREVENTING COMPLICATIONS OF CARDIOVASCULAR CONDITIONS

Loss of appetite or anorexia - this symptom may be associated with cardiovascular system (CVS) disorders. For older patients, it is recommended to eat multiple small meals during the day instead of a few large ones. Serving appealing favorite foods can help improve intake.

Straining due to bowel-related issues

- Straining from constipation, using enemas, or removing fecal impaction can stimulate the vagus nerve (part of the parasympathetic system).
- This stimulation can slow down the heart rate, which is especially dangerous for patients with CVS disorders.

PREVENTING COMPLICATIONS OF PERIPHERAL VASCULAR CONDITIONS

- Avoid walking barefoot to prevent injuries.
- Notify a nurse or doctor promptly about any foot sores, lesions, or changes in skin color for evaluation and assessment.
- Take measures to stop normal foot perspiration from leading to infection.
- Thoroughly check the areas beneath the toenails.
- Take off shoes several times daily to let the feet dry out.
- Examine the spaces between the toes and keep them dry, particularly when using rubber slippers.

PREVENTING COMPLICATIONS OF PERIPHERAL VASCULAR CONDITIONS

- Recommend shoes that are slightly larger than the foot size, but not so loose that they cause injury or increase fall risk.
- Avoid tight shoelaces to prevent excessive pressure on the feet.
- Let shoes air out when not being worn to keep them dry.
- Encourage regular sock changes.
- Take steps to prevent foot injuries and burns.
- Teach the client foot and toe exercises to promote healthy circulation.

PREVENTING COMPLICATIONS OF DIABETES MELLITUS

- Hypoglycemia - In older adults with Non-Insulin-Dependent Diabetes Mellitus (NIDDM), this condition can be triggered by insufficient food intake, excessive physical activity, or too much medication. Prompt treatment is necessary for any hypoglycemic episode.
- Hyperglycemia - Related complications may lead to hyperglycemic hyperosmolar nonketotic syndrome, which is also a life-threatening condition.

PREVENTING COMPLICATIONS OF DIABETES MELLITUS

- Peripheral Vascular Disease - This condition is affected by reduced circulation and atherosclerosis, which are commonly linked to aging. Symptoms include numbness and weak pulses, and it may worsen to cause infection and gangrene.
- Retinopathy - Older adults may experience vision issues due to blood vessel problems in the eyes. Individuals with long-standing hypertension and diabetes face a higher risk of developing this complication.

PREVENTING COMPLICATIONS OF STROKE

Post-acute and Rehabilitation Care

- The goal of post-acute and rehabilitation care is to prevent complications and restore optimal function. This phase may last several months and requires active family involvement. A positive and supportive environment helps motivate the patient toward recovery.

PREVENTING COMPLICATIONS OF STROKE

Care for the stroke patient includes:

- Maintaining airway patency, promoting deep breathing, and monitoring vital signs and neurologic status
- Providing hygiene and skin care, repositioning every two hours, performing range-of-motion exercises, and ensuring proper nutrition
- Assessing communication and visual deficits, offering reorientation, and providing emotional support
- Supporting bladder and bowel training, assisting with mobility and transfers, educating on medications, and coordinating rehabilitation activities

PATIENT AND FAMILY HEALTH EDUCATION

These are the three recommended strategies:

Enabling Strategies

- This approach focuses on providing education about the health condition.
- Most barriers to compliance stem from insufficient knowledge regarding the health condition.

PATIENT AND FAMILY HEALTH EDUCATION

These are the three recommended strategies:

Prompting Strategies

- Tools are utilized to assist in improving compliance.

Reinforcing Strategies

- Reinforcement begins with the health worker through a demonstration of sincere concern for the client's well-being. Motivation can be strengthened by positive attitudes such as empathy, friendliness, honesty, and effective communication.

PSYCHOSOCIAL SUPPORT FOR THE OLDER PERSON AND FAMILY

Psychosocial support refers to the integration of psychological and social factors that affect the patient.

A therapeutic relationship is necessary to recognize psychosocial needs.

PSYCHOSOCIAL SUPPORT FOR THE OLDER PERSON AND FAMILY

Fear and Anxiety

- Fear of the unfamiliar is experienced by every patient and often by family members as well.
- Unclear answers to their questions may sometimes increase these fears. Reassurance and sufficient information can help reduce fear and anxiety.

Coping

- This concept involves a dynamic behavioral and cognitive process through which individuals manage stress. Coping is learned, and previous experiences influence how a person copes.

PSYCHOSOCIAL SUPPORT FOR THE OLDER PERSON AND FAMILY

Hopelessness

- Individuals displaying this behavior may express limited alternatives.
- They may feel they have few opportunities to make personal choices.

Emotional Responses

- Feelings of sadness, powerlessness, despair, depression, anger, and frustration are commonly triggered by illness.

The image features a light blue background with decorative elements in the corners. In the top-right and bottom-left corners, there are dark blue wavy shapes. Overlaid on these waves are white geometric patterns consisting of interconnected lines forming various polygons, resembling a network or a stylized globe. The central text is written in a dark blue, handwritten-style font.

THANK YOU