



Nursing Instruction of Peripheral Artery Occlusive Disease (PAOD)

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I .Definition

The arterial intima is potentially smooth. HTN, the carbohydrates or nicotine compounds in cigarette, high cholesterol level, DM and trauma of vessels will cause lipid plaque aggregated in the intima. This process will induce inflammation of intima, and then result in vascular ulceration or calcification. The intima becomes uneven, so atherosclerosis and thrombus occur gradually. It leads to stenosis, and causes obstruction of blood supply. The distal part of tissue will no longer receive enough circulation, so ischemia and necrotic change happen. This is so-called (PAOD).

II . Signs and Symptoms

The severity of symptoms depends on the degree of stenosis (obstruction). The most common 6 symptoms are paralysis. Pain. Paresthesia. Pulseless. Pale and Cold skin. Desquamation ∙ Pale and nails and legs congestion with purpura while hanging down could be found due to poor perfusion over the involving limbs.

III . Clinical Classification

i.Acute peripheral arterial occlusion : sudden (within hours) and severe pain, numbness and strengthlessness will come. Limbs necrosis happened if vascular occlusion couldn't be fixed immediately and collateral circulation failed. Treatment of re-vascularization should be applied within 6-8 hrs.

ii.Chronic peripheral arterial occlusion : Progressed vascular stenosis, especially lower legs, occurs with time. You may feel legs painful and powerless during exercise, and symptoms relieve after rest. This is claudication. when arterial occlusion is worse, you can't get better even talking a rest. The involved tissue finally could get ulceration or even necrosis.'

IV. Treatment

Treatments are suggested according to different clinical classification and severity of patient's condition.

i. Chronic peripheral arterial occlusion

A. For patients with mild symptoms: medication for circulation improvement and simple rehabilitation exercise.

B. For patients with severe symptoms : anticoagulants and percutaneous trans-luminal angioplasty (PTA), with or without intra-vascular stent, are advised. Peripheral arterial bypass surgery may be considered for more severe condition.

ii. Acute peripheral arterial occlusion

A. Administer the anticoagulants and anti-platelet agent

B. Undergo the arterial catheterization or surgical thrombectomy.

V. Notice of Daily Care

i. Maintain a healthy life-style

- A. Quit smoking (including second-hand smoke) and avoid caffeinated beverages; prevent from vasoconstriction
- B. Lose weight
- C. Control chronic diseases such as diabetes, hypertension, and hyperlipidemia
- D. Adequate exercise can improve collateral circulation. If you have ulcers or wounds on your legs. Please do under doctors' instruction

ii. Avoid legs injury

- A. Simple exercise on the bed : Avoid sitting or lying down with fixed posture, too high or too low chairs, crossing legs, or putting pillow beneath knee that may increase compression and influence the blood circulation
- B. Wear socks to keep the limbs warm, and get enough blood perfusion
- C. Do practice correct nursing care of feet.
 - a. Check the integrity of skin between your toes
 - b. Clean your feet with neutral cleaning liquid or soap
 - c. Use lotion to avoid dry foot;
 - d. Wear appropriate shoes, and avoid walking barefoot.

iii. Precaution of using anti-platelet agent and anti-coagulant

- A. Take daily medication on time, and do not change the dose or withdrawal without instruction
- B. You can use the toothbrush with soft bristle or electric razor, and Avoid collision to prevent bleeding. When you have following symptoms such as subcutaneous hemorrhage, gingival or nasal bleeding, hematuria, bloody stools, tarry stools, or persistent bleeding, you must seek medical help immediately
- C. If you got a cutting wound with bleeding ,you should compress the wound sat least5-10minutesto stop the bleeding.
- D. When visiting other doctors , you should tell them that you take anticoagulant to treat PAOD. this will help doctors to evaluate your condition precisely.

iv Precaution of peripheral arterial bypass surgery

- A. Under going Avoid to compressing the site of vascular bypass surgery, including check blood pressure, drowing blood, wearing tights, and making the movement of crossing legs, squatting, and flexing the hips and knees.
- B. keep the wound clean and dry to avoid inflection. Also, remember to change the dressing on time and return to OPD for stitches removal.
- C. Please take OPD follow-up regularly under doctor's instruction in order to assessing prognosis and treatment adjustment.

If you have any question or suggestion, please contact with us. We are happy to provide you services to you. Contact telephone number: MacKay Memorial Hospital: (02)25713760; Hsinchu MacKay Memorial Hospital: (03)5745098; Taitung MacKay Memorial Hospital: (089)310150 ext: 311. Time of consultant: 9:00 am~12:00 noon, 2:00 pm~5:00 pm Monday ~ Friday.

May God Bless You