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## **PERIPHERAL ARTERY DISEASE: A CASE STUDY**

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### **ABSTRACT**

Peripheral artery disease is a condition of the blood vessels that supply arms, legs and feet. It is mainly occur due to the narrowing of the arteries and oftenly caused by atherosclerosis. Acute peripheral artery occlusion can lead to acute ischemia of the extremities and possibly leading to necrosis of the feet and arms. Through certain investigations like Echo cardiography, Angio graphy, Ankle bracial index, Doppler ultrasound, CT Scan and MRI confirmed the diagnosis. Treatment like antiplatelets therapy, lipid lowering agents, thromboendartectomy treats the disease.

**Keywords:** *Peripheral Artery Disease, Atherosclerosis, Doppler Ultrasound, Thromboendatectomy.*

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### **1. INTRODUCTION**

Peripheral artery disease is the narrowing or blockage of the vessels of upper and lower extremities and it makes difficult to blood to carry oxygen and nutrients to the tissues in these areas. <sup>[1]</sup>It is mainly caused by the build up of fatty plaque in the arteries called as atherosclerosis. <sup>[2]</sup>The prevalence of Peripheral Artery Disease (PAD) increases with age and starting from the age of 40 years and shown prevalence of 15-21% over the age of 70 years. Men and women are equally affected with PAD. The risk factors of Peripheral Artery Disease (PAD) included smoking, arterial hypertension, diabetes mellitus, nicotine abuse, dyslipidemia, chronic renal failure. <sup>[3]</sup>

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### **2. CASE PRESENTATION**

Here we present a case of Peripheral Artery Disease. A 38 years old female, house wife visited to IGMC Shimla, HP with the chief complaints of pain, pulselessness in right arm, gangrene in right arm, cold extremities and blackening of fingers. She was experiencing above mentioned symptoms from last two weeks.

#### **Past Medical History:**

Patient was having significant history of raynaud disease since 2016.

#### **Past Surgical History:**

Having significant history of below knee amputation of left leg done on 2017.

#### **General Examination:**

Weight: 68Kg

Height: 160cm

BMI: 26.6kg/m<sup>2</sup>

Physical activity: having difficulty in performing daily routine activities.

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### **3. SPECIAL INVESTIGATION**

On examination peripheral pulses is absent on left side. Ankle brachial index is 0.5 and indicated Peripheral Artery Disease. Other investigation has been done like ECG, 2 D Echo Cardiography, X-ray, CBC, LFT, RFT. Angiography indicated that patient having small cell vasculitis.

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#### 4. TREATMENT

Tab. Ecosprin 20mg OD, Tab. Cilostazol 100 mg BD, Tab. Ultracet 325 mg TDS, Tab. Alprex 0.25 mg HS

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#### 5. INTERVENTIONS

CART procedure was done. Patient was advised to avoid mobilization of right leg and take adequate amount of rest.

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#### 6. CARE PLAN

Eat a healthy diet- Advised to take fruit and vegetables, low-fat or fat free dairy products, poultry, fish and whole grains. Avoid excess salt and sugar. Aerobic exercises helps in improves the cardiac activity and minimize the risk of left ventricular hypertrophy.

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#### 7. OUTCOME

After the CART procedure the patient's finger's pain and coldness of extremities was relieved at some extent.

- Patient was advised to take the prescribed medication.
  - Patient was advised to visit hospital after 15 days for follow up.
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#### 8. DISCUSSION

Peripheral artery disease is most commonly characterized by narrowing of the blood vessels and atherosclerosis is the most common cause. Certain contributing factors are leading to PAD such as smoking, diabetes, dyslipidemia and hypertension. The male to female incidence is 1:1. Clinical features of PAD are characterized by 6 P's: Pain, pulselessness, pallor, paresthesia, paralysis and poikilothermia.<sup>[5]</sup>Diagnosis of PAD is confirmed with the Echocardiography, Ankle brachial index, Angiography, CT Scan and MRI. The treatment option for PAD is Antiplatelet therapy, lipid lowering agents, anti hypertensives and PDE inhibitors (cilostazol).

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