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#### A CASE OF LERICHE SYDROME

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#### ABSTRACT

Leriche syndrome is an aortoiliac occlusive disease due to blockage of abdominal aorta as it transitions into common iliac arteries. First described by Leriche and Morel in1940, is an atherosclerotic occlusive disease characterized by complete occlusion of the infrarenal aorta with the clinical tetrad of absent femoral pulses, intermittent claudication, gluteal pain and impotence. Here, we present a case of 51 year old male, a chronic smoker, who came with complaints of pain in both the lower limbs since 2months. On examination he was found to have absent dorsalis pedis, popliteal artery and feeble femoral pulsations bilaterally.

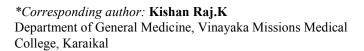
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## **INTRODUCTION**

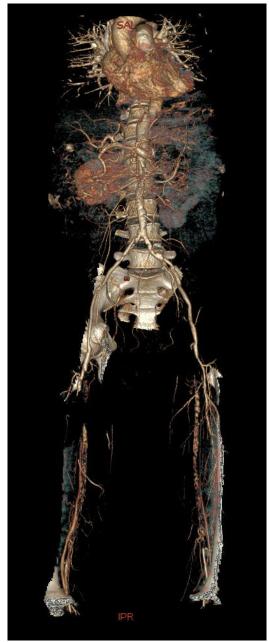
A 51 year old male who is a known smoker and alcoholic who is not on regular treatment for Systemic hypertension and Diabetes Mellitus since 5 years came with complaints of pain in bilateral lower limbs which increases on walking for a short distance and relieves on rest with h/o back pain. Upon further enquiry he revealed history suggestive of gluteal claudication, and inability to achieve erection. On examination, he was found to have hypertension with absent dorsalis perdis, popliteal artery and feeble femoral pulsations. Systemic examination revealed no abnormalities. ECG was showing LVH strain pattern and ultrasound revealed bilateral small kidney with renal artery Doppler revealing decreased renal blood flow in the left side. Doppler of bilateral lower limb revealed extensive narrowing of vessels. CT aortogram was done which revealed features suggestive of Leriche syndrome. He was treated with antiplatelets and antihypertensives. He was given the option for operative treatment of aorto-iliac and aorto-femoral graft bypass surgery and was referred to higher centre for same.

# Ct aortogram - abnormal vessel wall thickening of the aorta and its branches.

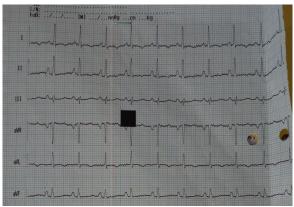
- SMA thrombosis.
- IMA- ?thrombosis/ completely stenosed not opacified.
- Significant narrowing of left renal artery with delayed functioning and left kidney which is small in size.
  - Bilateral SFA complete thrombosis. Features suggestive of leriche syndrome.







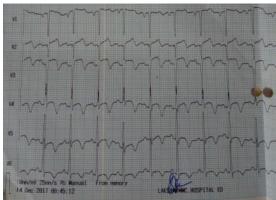
1. SMA – thrombosis



2. Bilateral SFA complete thrombosis



3. Significant narrowing of left renal artery



4, 5. ECG showing LVH with strain pattern.

# **DISCUSSION**

First described by Leriche and Morel in1940<sup>1</sup>, Leriche syndrome is an atherosclerotic occlusive disease characterized by complete occlusion of the infrarenal aorta with the clinical tetrad of absent femoral pulses, intermittent claudication, gluteal pain and impotence. Atherosclerotic occlusion of aortoiliac arteries is the main reason for Leriche syndrome. Though progression of the disease is quite variable, it may ultimately extend to the level of the renal arteries or result in total aortic occlusion.<sup>2</sup> The resulting narrowing of the distal aorta and iliac arteries decreases blood flow to the pelvis and lower extremities, thereby causing symptoms such as pain, claudication, and impotence commonly seen in affected males. Symptoms of the patients vary according to these two factors: 1)Level of occlusion 2)Number collaterals of vascular developed. Prognosis of the disease involves in early diagnosis and immediate treatment of the condition so as to salvage the limb and organs involved. Screening of suspected patients can be done by Ultrasound Doppler and ankle brachial pressure index measurement.3

Gold standard modality of investigation is by taking serial CT angiogram. In the above case, characteristic occlusion of infrarenal aorta with collaterals along with left renal artery stenosis were demonstrated. Atherosclerosis was diffuse and predominantly in left renal and infra renal aorta. ECG was showing LVH strain pattern due to hypertension. Treatment is usually surgical. Intraarterial thrombolysis might be considered as another option in cases of mild ischemia. However, open surgical techiniques are optimal therapy to reduce amputation rate and mortality in patients with this condition. Traditional operative management for this syndrome is aortoiliac endarterectomy and aortobifemoral bypass.

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