

Name : Mr. Kannan

Age : 40 years

Sex: Male

Address: Tambaram

Occupation: Works in a fruit shop

Socio Economic Class: Upper Lower class

Chief Complaints :

Pain in the left leg for the past 2 years more for the past 2 months

History of presenting illness

The patient was apparently normal 2 years back after which he developed

PAIN – *In his left leg*

For 2 years more for the past 2 months

In the calf and foot region

INTERMITTENT - Brought about by walking

Cramping and Excruciating type of pain

Not radiating , Not referred

Aggravated on walking up stairs

Initially relieved on standing and now on rest

BOYD'S CLASSIFICATION – GRADE 3

OF INTERMITTENT CLAUDICATION

Claudication distance and progress of claudication

- Initially pain occurred only after 2 kilometers of walking which gradually reduced and now pain occurs if the patient walks 10 feet

No H/O rest pain

No H/O effect of warmth or cold on the pain

NO H/O suggestive of local causes of pain such as trauma to the legs , swelling of legs , fever

No H/O tingling or numbness sensation

No H/O ulcers over the leg

No H/O blackish discolouration of any part of the leg

No H/O suggestive of **superficial phlebitis** such as pain , swelling , redness , cord like thickenings along the course of veins

No H/O suggestive of **Raynaud's Phenomenon** such as attacks of pain , pallor ,bluish or dusky red discolouration on exposure to cold

No H/O blackish discolouration of finger tips after such attacks

No H/O suggestive of occlusive arterial disease elsewhere in the body :

No H/O Chest pain , palpitations, breathlessness

No H/O Black outs , loss of consciousness, weakness of limbs

No H/O Blurring of vision

No H/O Abdominal pain

No H/O Impotence

Past history

- ***For the past 2 years , the patient has been visiting private clinics and has taken native medications but symptoms did not resolve***
- ***No H/O similar complaints in the past***
- ***No H/O diabetes mellitus , hypertension , tuberculosis asthma ,epilepsy ,jaundice***
- ***No H/O Cardiac diseases , cerebrovascular accidents , hyperlipidemia, collagen diseases***
- ***No H/O previous hospitalisation /surgery***

Personal history

- ***Patient consumes non-vegetarian diet***
- ***Normal bowel and bladder habits***
- ***H/O Smoking from the age of 13 years***
No of years of smoking : 27 years
Smokes 3 packets of cigarettes per day
SMOKING INDEX : 810
PACK YEARS INDEX : 81
- ***H/O Alcohol consumption for the past 1 year***
180 ml per day
- ***No H/O drug abuse***

Allergy history

No H/O allergy to any food or drugs

Family History

No H/O Similar complaints in the family

No H/O suggestive of atherosclerosis in the family

Summary

A 40 year old male ,who is a chronic smoker presented with complaints of excruciating pain in calf and foot during walking which is relieved by rest of BOYD'S GRADE 3 with history suggestive of progressive claudication .

The probable diagnosis is peripheral vascular disease involving femoral , popliteal , tibial arteries .

General examination

After getting consent from the patient , the general examination was done.

Conscious, oriented, moderately built and nourished

No pallor

No icterus

No cyanosis

GRADE 1 clubbing present

No pedal edema

No generalised lymphadenopathy

SIGNS OF ATHEROSCLEROSIS – NO Arcus senilis , no transverse ear crease , no xanthomas

Vital signs

Pulse rate : 82 /min , regular in rhythm , normal in volume and character , no vessel wall thickening , no radioradial/radiofemoral delay

Dorsalis pedis , posterior tibial and popliteal pulsations absent in the left lower limb

Respiratory rate : 16/min , abdominothoracic

Blood pressure : 110 /70 mm hg measured in left upper arm in sitting posture

Patient is afebrile

Examination Of Lower Limbs

After explaining the procedure and getting consent , patient was exposed from mid thigh and examination was done under bright light

***INSPECTION** – patient in supine posture with both the legs kept side by side*

***Attitude :** the limbs are extended at both hip and knee joint*

No deformity present

Muscle wasting present in the calf region in left leg

No redness , swelling along the course of superficial veins

NO COLOUR CHANGE VISIBLE

Examination of lower limbs

Signs of peripheral ischemia : present in left limb

- There is diminished hair over the left limb - calf***
- Thinning of skin present***
- There is Loss of subcutaneous fat***
- Shininess present***
- Trophic changes in nail : brittle nail present***
- No ulceration in pressure areas like heel , malleoli , ball of foot , tip of toes***

A scar of 5 x 4 cm is present over the inner aspect of calf in the right leg, scar is healthy – history suggested as silencer burn

Left



Right



Tests on inspection

***GUTTERING OF VEINS** : present on elevation of the limbs*

***BUERGER'S POSTURAL TEST** : was not able to appreciate the pallor and pink appearance as the patient was dark skinned*

***CAPILLARY FILLING TIME** : was not able to appreciate the pallor and pink appearance as the patient was dark skinned*

***VENOUS REFILLING** : in the left lower limb veins collapsed at 30 degree and refilling was slower when compared to the right side*

EXAMINATION OF LOWER LIMBS

NO GANGRENE OR ULCER PRESENT OVER BOTH THE LOWER LIMBS

PALPATION

Skin temperature : skin is warm over both the lower limbs except for the left foot which is cold

No tenderness present

No swelling ,tenderness , cord like thickening of veins

Tests on palpation

Capillary refilling :

There was delay in the time taken for blanched toe of left lower limb to turn pink when compared with the right side

Venous refilling (harvey's sign):

Refilling of vein segment slow in the left lower limb when compared to the right side

Crossed leg test (FUCHSIG'S TEST) : was not well appreciable

Examination of Peripheral pulses

	<i>RIGHT</i>	<i>LEFT</i>
Superficial temporal artery	++	++
Carotid artery	++	++
Brachial artery	++	++
Radial artery	++	++
Femoral artery	++	+
Popliteal artery	++	-
Posterior tibial artery	++	-
Dorsalis pedis	+	-

Examination Of Joints

<i>Movements of</i>	<i>Right</i>	<i>Left</i>
<i>Interphalangeal joint</i>	<i>N</i>	<i>N</i>
<i>Metatarsophalangeal joint</i>	<i>N</i>	<i>N</i>
<i>Ankle joint</i>	<i>N</i>	<i>N</i>
<i>Knee joint</i>	<i>N</i>	<i>N</i>
<i>Hip joint</i>	<i>N</i>	<i>N</i>

Examination of nerves

MOTOR

Bulk (Calf)

RIGHT

31cm

LEFT

28cm

Tone

normal

normal

Power

5/5

5/5

Reflexes

normal

normal

Plantar response

flexion

flexion

SENSORY

Crude / fine touch

+

+

Pain

+

+

Temperature

+

+

Vibration

+

+

Examination of lymph nodes

Inguinal lymph nodes are not enlarged

Auscultation

No bruit

No murmurs

Reactive hyperemia test :

To be done

Systemic examination

Respiratory system :

Normal vesicular breath sounds heard . No added sounds

Cardiovascular system :

S1 S2 heard . No murmurs

Central nervous system :

No focal neurological deficit

Abdomen :

Soft , non tender , no organomegaly , no free fluid , hernial orifices free , external genitalia normal

Spine and cranium : normal

Diagnosis

Compensatory Peripheral vascular disease of left lower limb in the form of Thromboangiitis Obliterans (Buerger's disease) with probably Femoropopliteal occlusion (type 3)without any complications .

Differential diagnosis :

Atherosclerosis

Vasculitis

Management

Investigations

Baseline: Complete blood count – TC , DC , ESR
Hb% , blood grouping and typing ,BT,CT
Blood sugar , urea , serum creatinine
Urine routine : albumin ,sugar,deposits
X ray chest , ECG
Serology : HIV , VDRL , HBsAg

Specific investigations

-Blood sugar : fasting , post prandial , HbA1C

-LIPID PROFILE

***-Anti nuclear Ab , Anti Phospholipid Ab,
homocysteine levels***

-DOPPLER ultrasound

-DUPLEX SCAN

-Angiography

-BROWN'S VASOMOTOR INDEX

Treatment

Non surgical methods

SMOKING ABSTINENCE

MEDICAL MANAGEMENT

ANALGESICS-Tramadol-50mg TID

Ketorolac-20mg TID

PENTOXIFYLLIN-400mg TID

Used to treat intermittent claudication.

Improves blood flow through the peripheral blood vessels by increasing flexibility of RBC, decreasing platelet aggregation and thrombus formation, reduces blood viscosity.

Beurger's position

Beurger's exercise

Heel raise : to decrease load on calf muscles