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YOUVA

Case Sheet Case No: 4.

Name: Krishnan kutty
Age/Gender: 59/M
Addess: Perumbavoor
Occupation: Manual Labourer.
D.O.A: 18/2/26.

CPC:-

1. Pain over both the legs x 2 years
2. Blackish discoloration over right 3rd & 4th toe x 1 month
3. Non-healing ulcer over right foot x 1 month.

H/o Presenting Complaint:-

Patient was a reformed smoker who apparently normal 2 yrs back, when he developed pain in both legs on walking x 2 yrs back

-> Pain is insidious in onset, gradually progressive
-> Occurs on walking & relieved by rest → suggestive of intermittent claudication
-> Pain mainly involves calf muscles
-> walking distance gradually reduced over time
-> Suggestive of Grade II claudication (Boyd's classification)

1 month back he had a h/o trauma over right 3rd toe. Developed a non-healing ulcer at the site for which he applied a local medication which later developed into blisters. The ulcer progressively increased in size later developed blackish discolosation of toe (gangrene) associated with reduced sensation over the area for which he underwent amputation of right 3rd & 4th toes.

[H/o ulceration over left 5th toe & undergone debridement 1 yr back]

H/o pain over both legs even at rest (suggestive of rest pain)
Pain worsens at night, affecting sleep.
H/o tingling / pin & needles sensation (paresthesia).
→ no H/o pain aggravated by heat or cold
→ no H/o fever or acute infection
→ no H/o joint pain
→ no H/o chest pain, syncope or stroke.
→ no H/o fainting, transient black out, blurred vision.

Past History:

1) Known case of HT x 3 yrs
On Tx: Telmisartan, Amlodipine
2) Known case of Dyslipidemia x 2 yrs
On statins.
3) no H/o DM, TB or asthma
4) ~~H/o similar leg pain in past~~
5) H/o skin changes (peeling, discoloration) x 3 yrs.

Personal History

1) Reduced appetite
2) Reduced sleep
3) Regular bowel & bladder habits
4) Smoking from age of 7 yrs and stopped 12 yrs.
5) H/o alcoholism present.

Family History - N.I

General Examination :-

Middle-aged man sitting on bed
Moderately built & nourished.

P I C C(-)

-> Edema present over left leg.
-> No significant lymphadenopathy.

Vitals :-

-> Pulse - 98 beats/min
no thickening of vessel walls.
Pulsation is diminished ~~that~~ I will describe the examination findings later on local examination of lower limb.

-> RR = 18 cycles/min
Abdominothoracic.

-> BP - 174/100 mm Hg over right arm in sitting positn.

Head to foot examn :-

-> Hair normal
Skin - Blackish discoloration over left iliac region, shin of right leg.
healed wound present over right fingers.

Nail -> Nail of toe - Hard, brittle.

Local Examination:-

Patient was examined after obtaining verbal consent in a well-lidded room with adequate light & privacy was maintained. The patient was adequately exposed from the waist down. I examined the normal (left) limb first.

Inspection:- (Inspection was done in supine position)

On inspection of both limbs following points were noted.

(Left lower limb)	Right LL.
:) Normal attitude	:) Normal.
-> Shiny skin with hair loss; evidence of a healed scar over the 5th toe (post-debridement)	→ Shiny skin loss of subcutaneous fat.
:) Nails were brittle	→ brittle with trophic change.
:) No gangrene	→ Blackish discoloration ~~Dry gangrene of~~ the 2nd toe (dorsal surface) Dry gangrene Line of demarcation p. :) Surrounding tissue normal.
:) All toes present; 5th toe show scar from previous debridement	→ 3rd, 4th & 5th toes amputed.

→ Ulcer – none

6 x 4 cm ulcer on the dorsum of the foot with healthy granulation tissue Extent from 1st metatarsal space upto 3 cm below midpoint of lateral & medial malleolus covering skin of 3rd, 4th, & 5th toe.

Palpation :-

Buerger's test (Postural)

Right limb become pallor white elevated at buerger's angle : 45°

Left limb remains pink. (suggesting better collateral or less severe occlusion comp. to right)

Palpation :-

~~Skin~~

Left limb (Normal)	Right limb (Affected)
Temp : Normal	Normal
Tenderness : Abs	Present over the ulcer & gangrene.
Capillary refill Normal (< 2s)	Normal at the 1st toe nail top
Edema Present	Absent
Sensation Intact	Reduced / loss of Sensation over right ~~the right~~ foot.

On palpating the peripheral pulses bilaterally.

→ Pedis pedis – Abs On R
Abs / Feeble on Left

2. Poslr. tibial → Abs on Rt.
Abs / Feeble on Left
3. ~~Popliteal~~ Anlr. tibial → Abs Rt & Left
4 popliteal (R & L) (–)
5. Femoral pulse: Present & equal on both sides.

Upper limb Pulses: Radial, Brachial & Carotid pulses are present & normal Bilaterally.
Gangrene: hard; dry; shrivelled.

Provisional Diagnosis:

A 59-yr old male, ~~a chronic~~ reformed Smoker & known hypertensive, ~~with a hfod~~ suggestive of Peripheral Arterial Occulusive Disease of both lower limbs for 2 yrs. most probably now presenting with Critical Limb Ischemia of Righ LL, manifested by Dry gangrene of right 2nd toe & a chronic Ischemic ulcer on dorsum of right foot Most likely atherosclerotic etiology Risk factors like Smoking & HT present.

Summary:

Krishnankutty, a 54 yr old male from Perumbavoor who is a reformed smoker, known case of HT & dyslipidemia presented with a 2 yr h/o bilateral intermittent claudication (Boyd's Grade II) & recent onset rest pain in the rt leg.

1 month ago following minor trauma he developed an ulcer & subsequent dry gangrene of the right 3rd, 4th and 5th toes, necessitating amputation. He also had a h/o a previous ulcer debridement on Lft 5th toe one yr ago.

On examination: Patient is hypertensive (174/100mm) with edema noted in the left leg.
Local examination findings reveals trophic changes present bilaterally. Dry gangrene of the right 2nd toe with a clear line of demarcation & a 6x4 cm ischemic ulcer on the right dorsum.
Palpation: Distal pulses → Dorsalis Pedis, PT, Atl, popliteal are absent on right side & significantly diminished on the left while femoral pulses remain palpable bilaterally

A positive Buerger's test was noted on right limb with a Buerger's angle of 45°, while left limb remained pink upon elevation

Investigations:

ECG & echocardiogram
1. Lipid Profile → for Atherosclerosis (H-T Dyslipidemia)
2. Blood Routine
3. Renal involvement

Imaging
4. Arterial Duplex USG: To visualise the level of occlusion & biphasic flow wave patterns.
5. CT Angiogram
↓
Adv over Duplex & Doppler
(5) → we can see the site & extent of the obstruction. and stenosis can be clearly identified.
(4) → To assess collateral
(1) → To plan surgical procedure
(2) → To assess the type thrombi/emboli
(3) → Distal patency of blood vessels. (Distal runoff)
(Note: Very short scg: plan for angioplasty.

6. Digital Subtraction Angiography.
7. Direct Punctate Arteriography

Management / Tx:

1. Mx of General Conditions
Here control of HTN, Dyslipidemia
Smoking cessation (Already reformed smoker)
2. Mx of wound / ulcer proper.

∴ In this case: Keep the area dry & clean to prevent conversion to wet Gr.

∴ Debridement - Removal of necrotic tissue.

3. Mx of treating predisposing factors
Medical Mx

∴ Blood P. control; Aim for <130/80 mm Hg
(continue Telmisartan / Amlodipine)

∴ High intensity statins.

∴ Antiplatelet therapy: to reduce risk of MI & Stroke.

4. Surgical Mx (if reasonable)
Since the patient has CLI → medical therapy alone is insufficient.

Endovasmular
Angioplasty & stenting of the occluded segments.

Surgical Bypass.
(using syn-graft or patient's own GSV?
eg: Femoropopliteal bypass

Amputation:-
If revascularisation successful ~~can save the limb~~.
If fails → Below knee or Above knee.
or if there is infn (sepsis)
Limb is non-viable / causing intractable pain.