



ISSN: 0975-833X

Available online at <http://www.ijournalcra.com>

International Journal of Current Research
Vol. 14, Issue, 04, pp.21324-21326, April, 2022

DOI: <https://doi.org/10.24941/ijcr.43433.04.2022>

INTERNATIONAL JOURNAL
OF CURRENT RESEARCH

RESEARCH ARTICLE

A CASE OF ACUTE LIMB ISCHEMIA IN ED

¹*Rohith, K., ²Abhijit, B. and ³Das, I.

¹MBBS, DNB Emergency Medicine (PGT, Year 1), Department of Emergency Medicine, Medica Superspeciality Hospital, Kolkata

²MBBS, DNB (EM), Attending Consultant, Department of Emergency Medicine, Medica Superspeciality Hospital, Kolkata

³MBBS, FEM(RCGP-UK), MEM (GWU-USA), MRCEM-UK, HOD and Sr. Consultant Emergency Medicine, Department of Emergency Medicine, Medica Superspeciality Hospital, Kolkata

ARTICLE INFO

Article History:

Received 19th January, 2022
Received in revised form
20th February, 2022
Accepted 09th March, 2022
Published online 30th April, 2022

Key words:

Acute Limb Ischemia,
Claudication,
Peripheral Arterial Disease.

*Corresponding Author:

Rohith, K.,

ABSTRACT

Arterial disorders represent the most common cause of morbidity. Much of this is due to the effects of atheroma on the arteries supplying the heart muscle (coronary thrombosis and myocardial infarction) and brain (stroke), although atheroma is also common at other sites. This clinical condition is typically an Emergency Medicine based diagnosis and the definitive management is the forte of vascular surgeon who also addresses diseases that are typically the province of the vascular surgeon, namely those affecting the peripheral arterial system. Vascular disease that alters the normal structure and function of the aorta, its visceral branches and the arteries of the lower extremity are quite common and often a missed diagnosis or a delayed diagnosis in places with resource limited workforce. Peripheral artery disease (PAD), which typically refers to atherosclerotic arterial disease of the lower extremities, affects more than 200 million people worldwide.¹ PAD is considered a clinical manifestation of systemic atherosclerosis and is often present with concomitant coronary artery disease and cerebrovascular disease.²⁻⁴ Multiple studies have demonstrated a high risk of major adverse cardiovascular events (MACE), including myocardial infarction, stroke, and cardiovascular death, among patients with PAD.⁵⁻⁷ Beyond cardiovascular outcomes, patients with PAD are also at risk for ischemic limb events which can cause significant morbidity and reduce functional status and quality of life.⁸⁻¹⁰ In particular, acute limb ischemia (ALI) resulting from a sudden decrease in limb perfusion can lead to tissue loss and threaten limb viability.

Copyright©2022, Rohith. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Citation: Rohith, K., Abhijit, B. and Das, I. 2022. "A case of acute limb ischemia in ED", International Journal of Current Research, 14, (04), 21324-21326.

INTRODUCTION

CASE REPORT: Here we present a case of a 91 year old Smoker Male patient, who is a Hypertensive on medication, who came into our Emergency Room with complains of Sudden onset of Left Leg pain for the last 6 hours, and the pain gets aggravated on walking for certain distance and patient complained of mild degree of weakness in the Left Lower Limb. No history of any Trauma. Patient was evaluated in the Emergency department.

PRIMARY SURVEY

- Airway – Patent
- Breathing – RR : 15/minute, SpO₂ – 98% on RA
- Circulation – HR : 78/ min, BP – 140/90 mmHg, Temp: 98 F
- Disability – GCS : E4V5M6, Pupils – B/L Equal and Reacting to Light; GRBS: 140 mg/dL

SECONDARY SURVEY:

HEENT: No Pallor, Icterus Cyanosis, Lymphadenopathy, JVP - Not Raised

CHEST

On Inspection: No Deformity or Scar Mark seen. No swelling or lump. Bilaterally Equal Chest Rise Seen

On Auscultation: Bilaterally Equal Vesicular Breath Sound. No Added Sounds Heard.

CVS: First and Second Heart sound audible, no murmur or friction rub sound

CNS: Conscious and oriented, No focal neurological deficit.

ABDOMEN

Inspection: No Scar, No Swelling,

Umbilicus - Normal in Position, No Engorged Vein.

Hernia Orifices- Normal.

Palpation: Soft, No Tenderness No palpable mass felt and normal bowel sound.

Percussion – No Dullness, Fluid Thrill or Shifting Dullness.

Auscultation: Bowel Sound Heard. No Tenderness, No Bruit.

External Genitalia: Normal

EXTREMITIES

Upper Extremities – Both Warm and Peripheral Pulse present.

Lower Extremities

Left Side – Severely Cold, Pale and Peripheral Pulses (Dorsalis Pedis) absent , Posterior tibial –Absent , Saturation Probe kept SpO₂- 52%

Right Side – Warm , Pink and Peripheral Pulses – Palpable , Saturation Probe kept SpO₂- 92%

INVESTIGATIONS

12 Lead ECG:

Reveals: Atrial Fibrillation with Controlled Ventricular Rate.



USG Doppler of Arteries of Both Lower Limb: Extremely sluggish flow in Left Common Femoral Artery and all the Arteries of Left Lower Limbs. Possibility of Acute Thrombosis in Left Common Femoral Artery , Left Superficial Femoral Artery cannot be ruled out.

Investigation advised CT Angiography. 2D Echo did not show any RA/RV dilatation and no Pericardial Effusion and no RWMA and EF was preserved.

MANAGEMENT: Initial Pain management was done with Inj Paracetamol 1 Gram IV Stat. The patient was given Inj. Unfractionated Heparin 5000 iv and referred to Vascular Surgeon and Cardiologist for further management.

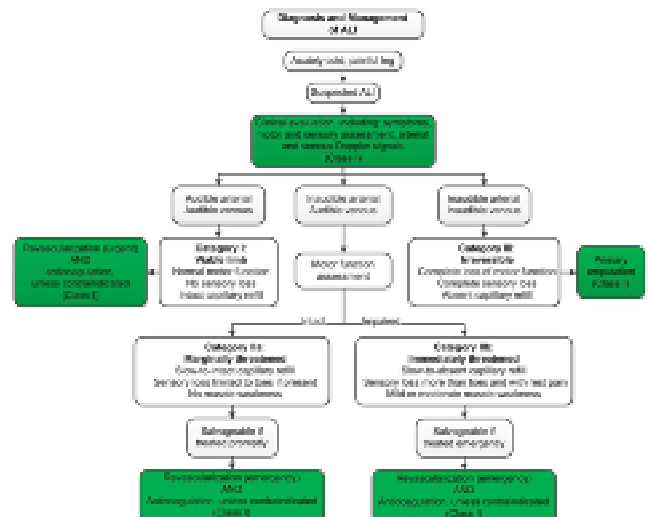
DISCUSSION

This patient had a typical Smoker history , who clinically presented with an acute history of Limb pain , all the vitals where found to be stable and a history of trauma has been ruled out . On clinical examination upon checking the Peripheral Pulses in both the extremities evoked a thought of a vascular occlusion. 12 lead ECG also showed an Atrial Fibrillation with controlled Ventricular rate, which itself is a pro-thrombotic condition. USG Doppler revealed the presence of occlusion of Large arteries of Left lower limb and a chance of Acute thrombosis cannot be ruled out.

CONCLUSION

This case has given me an insight, regarding the need for thorough clinical examination, history taking and most importantly a focused organ specific clinical examination including neurovascular examination (observing the Peripheral pulsation) of any patient presenting to ED , which actually was abnormal/absent and the only clinical sign which led to think about the diagnosis.

Evidence based management as per Standard Guidelines as per AHA¹¹ :-



REFERENCES

1. Fowkes FG, Rudan D, Rudan I, Aboyans V, Denenberg JO, McDermott MM, Norman PE, Sampson UK, Williams LJ, Mensah GA, et al.. Comparison of global estimates of prevalence and risk factors for peripheral artery disease in 2000 and 2010: a systematic review and analysis. *Lancet*. 2013; 382:1329–1340. doi: 10.1016/S0140-6736(13)61249-0
2. Cacoub PP, Abola MT, Baumgartner I, Bhatt DL, Creager MA, Liau CS, Goto S, Röther J, Steg PG, Hirsch AT; REACH Registry Investigators. Cardiovascular risk factor control and outcomes in peripheral artery disease patients in the Reduction of Atherothrombosis for Continued Health (REACH) Registry. *Atherosclerosis*. 2009; 204:e86–e92. doi: 10.1016/j.atherosclerosis.2008.10.023

3. CAPRIE Steering Committee. A randomised, blinded, trial of clopidogrel versus aspirin in patients at risk of ischaemic events (CAPRIE). *Lancet*. 1996; 348:1329–1339. doi: 10.1016/S0140-6736(96)09457-3
4. Hiatt WR, Fowkes FG, Heizer G, Berger JS, Baumgartner I, Held P, Katona BG, Mahaffey KW, Norgren L, Jones WS, et al.; EUCLID Trial Steering Committee and Investigators. Ticagrelor versus clopidogrel in symptomatic peripheral artery disease. *N Engl J Med*. 2017; 376:32–40. doi: 10.1056/NEJMoa1611688
5. Criqui MH, Ninomiya JK, Wingard DL, Ji M, Fronck A. Progression of peripheral arterial disease predicts cardiovascular disease morbidity and mortality. *J Am Coll Cardiol*. 2008; 52:1736–1742. doi: 10.1016/j.jacc.2008.07.060
6. Steg PG, Bhatt DL, Wilson PW, D'Agostino R, Ohman EM, Röther J, Liao CS, Hirsch AT, Mas JL, Ikeda Y, et al.; REACH Registry Investigators. One-year cardiovascular event rates in outpatients with atherothrombosis. *JAMA*. 2007; 297:1197–1206. doi: 10.1001/jama.297.11.1197
7. Bonaca MP, Scirica BM, Creager MA, Olin J, Bounameaux H, Dellborg M, Lamp JM, Murphy SA, Braunwald E, Morrow DA. Vorapaxar in patients with peripheral artery disease: results from TRA2^P-TIMI 50. *Circulation*. 2013; 127:1522–9, 1529e1. doi: 10.1161/CIRCULATIONAHA.112.000679
8. Mahoney EM, Wang K, Keo HH, Duval S, Smolderen KG, Cohen DJ, Steg G, Bhatt DL, Hirsch AT; Reduction of Atherothrombosis for Continued Health (REACH) Registry Investigators. Vascular hospitalization rates and costs in patients with peripheral artery disease in the United States. *Circ Cardiovasc Qual Outcomes*. 2010; 3:642–651. doi: 10.1161/CIRCOUTCOMES.109.930735
9. McDermott MM, Greenland P, Liu K, Guralnik JM, Celic L, Criqui MH, Chan C, Martin GJ, Schneider J, Pearce WH, et al.. The ankle brachial index is associated with leg function and physical activity: the Walking and Leg Circulation Study. *Ann Intern Med*. 2002; 136:873–883. doi: 10.7326/0003-4819-136-12-200206180-00008
10. Regensteiner JG, Hiatt WR, Coll JR, Criqui MH, Treat-Jacobson D, McDermott MM, Hirsch AT. The impact of peripheral arterial disease on health-related quality of life in the Peripheral Arterial Disease Awareness, Risk, and Treatment: New Resources for Survival (PARTNERS) Program. *Vasc Med*. 2008;
11. AHA/ACC Guideline on the Management of Patients With Lower Extremity Peripheral Artery Disease: Executive Summary: A Report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines.
