



Case Report on Intra Arterial Thrombosis

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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Case Study

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ABSTRACT

Introduction: A thrombosis is a blood clot in an artery that can be highly harmful because it stops blood from reaching essential organs. Arteries are blood vessels that convey blood from the heart to the rest of the body and the heart muscle.

Clinical Finding: pain in left lower abdomen and as well as thoracic region also and pain in lower limb extremities are also occurred, pulse is 78 beats/ min, and temperature is 98.6°F or 37°.

Diagnostic Evaluation: Blood test:- Hb -14.3 gm%, total RBC count - 4.84 millions/cu mm, RDW - 13.3%, HCT -42.4%, total WBC count -7100/cu mm, monocytes - 03%, granulocyte -70%, lymphocyte - 25%.

Peripheral Smear: RBC:- normocytic normochromic, Platelets:- adequate on smear, No hemiparasite seen **Ultrasonography:** There is no sonography report founded.

Therapeutic intervention: Inj. Ceftraxine- 19 mg, inj. Hydrotrsol - 100 mg, inj. Heparin - 5000 IV - TDS, tab. Ecosprin - 100 mg -OD, tab. Clopitab- 75 mg - OD.

Outcome: After treatment, the patient has improved his fever, pain in the chest, and lower extremities pain have all been reduced.

Conclusion: Patient was admitted to cardiology ward in hospital with known case of arterial thrombosis and he had complain of fever chest pain and also pain in lower limb. After getting

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appropriate treatment his condition was improved. Smoking, overweight, and drinking are additional factors that promote intra-arterial thrombosis. After getting therapy, patient's condition significantly improved, and the treatment was continue until final day of care.

Keywords: Arterial embolism; atherosclerosis; thrombus.

1. INTRODUCTION

Thrombosis is the formation of a blood clot inside a blood vessel, reducing flow of blood through the circulatory system [1]. The body generates a blood clot when a blood vessel (vein or artery) is injured. Platelets (thrombocytes) and fibrin are utilized to prevent loss of blood [2]. Even if a blood artery isn't ruptured, blood clots can grow in the body in certain circumstances. An embolus is a clot or a portion of a clot that breaks loose and begins to travel throughout the body [3].

Thrombosis can originate either in the veins or the arteries (venous thrombosis or arterial thrombosis) (arterial thrombosis). Arterial thrombosis (and, in rare cases, severe venous thrombosis) interrupts flow of blood and damages tissue in the supply artery (ischemia and necrosis) [4]. An thrombus can form when a portion of an arterial or venous thrombus breaks off and travels through the circulation to lodge someplace else [5]. Thromboembolism is the medical term for this form of embolism. An embolism can form when an arterial embolus moves along a damaged blood vessel [6]. An embolus sticking to the artery wall and inhibiting blood flow causes a sudden halt of blood flow to an organ or bodily component, with a blood clot being the most frequent type of embolus (thromboembolism) [7]. A pulmonary embolism can also be categorized as an arterial embolism since the clot follows the pulmonary artery, which transports deoxygenated blood away from the heart. Because the embolus develops in veins, pulmonary embolism is classed as a type of venous embolism [8]. Arterial embolism (which can be induced by a variety of factors) is the most common cause of ischemia (e.g. arterial compression, rupture of pathological vasoconstriction) [9].

1.1 Present Medical History

On the 10th of November, 2021, a male patient of 60 years old from hospital presented to the cardiological ward with complaints of lower limb discomfort and chest pain. His weight was 70 kg and height 153 cm.

1.2 Past Medical History

On the 10th of November 2021, a 60-year-old male patient was taken to the hospital by his family with complaints of lower-limb discomfort and chest pain, and he was admitted to cardiological ward number 30. He has been diagnosed with intra arterial thrombosis.

1.3 Family History

The family consists of four people. Intra arterial thrombosis was discovered in patient. Except for patient, who was admitted to the hospital, none of the other members of the family had any health issues.

1.4 Past Intervention and Outcome

The patient was diagnosed with aphthous ulcer and he had no any past intervention and outcome at any hospital.

1.5 Clinical Finding

Pain in left lower abdomen and as well as thoracic region also and pain in lower limb extremities are also occurred, pulse is 78 beats/min, and temperature is 98.6°F or 37°C.

1.6 Etiology

Arterial thrombosis is a disorder in which a blood clot forms within an artery, causing blood flow to be delayed or stopped.

Atherosclerosis, or artery damage, is the most prevalent cause of arterial thrombosis. On the interior walls of arteries, fatty deposits develop, blocking and narrowing them. The following are some of the risk factors for a blood clot in an artery: affects consuming a high-fat, high-carbohydrate diet, Obesity, Smoking, alcoholism, insufficient physical activity, diabetes (both type 1 and type 2) is a disease that people of all ages.

1.7 Physical Examination

In a head to toe assessment, there aren't many anomalies. EXCEPT for the thoracic cavity, the

skin and scalp are normal, and swelling in the lower limbs is uncommon and during the physical examination, the bilateral chest is cleared, S1 and S2 sound is present in the cardiovascular system, and discomfort of the umbilical area is evident in the abdomen examination. Once the patient is completely awake.

1.8 Diagnostic Assessment

Inj. Ceftraxine- 19 mg, inj. Hydrotrsol – 100 mg, inj. Heparin – 5000 IV –TDS , tab. Ecosprin – 100 mg –OD, tab. Clopitab- 75 mg – OD.

Peripheral smear:- RBC - normocytic normochromic, Platelets - adequate on smear, No haemoparasite seen.

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Therapeutic intervention:- Blood test :- Hb – 14.3 gm%, total RBC count – 4.84 millions/cu mm, RDW – 13.3%, HCT -42.4%, total WBC count –7100/cu mm, monocytes – 03%, granulocyte –70%, lymphocyte – 25%.

Outcome:- After treatment, the patient has improved his fever, pain in the chest, and lower extremities pain have all been reduced.

Chart 1. Nursing implication

Nursing intervention	Rationales
Establish rapport	To have a trusted nurses to patient relationship and to have therapeutic communication.
Assess lab levels to determine the effect of anticoagulant medication and report lab values that go outside of the target range.	The progress of the patient's arterial flow and peripheral tissue infusion is indicated in lab results.
Check for foot pulses and monitor oedema in the RLL. Keep a watch on edema-related discomfort (before treatment)	Variability in leg measurements of more than 2 cm should be investigated extensively. Swelling indicates how well blood is flowing through the arteries.

3. DISCUSSION

A male patient of 60 year old from, Maharashtra was admitted to cardiology ward no 30. In

hospital on dated 10 November 2021, with a complaint of pain in lower limb and chest pain. He is known case of intra-arterial thrombosis. Which he was diagnosed when he was 54 year old He showed significant progress after receiving therapy, and the treatment was kept ongoing until my last date of care.

Progressive or incredible experience brain stem symptoms, tetraplegia, and loss of consciousness that can range from mild to severe. In individuals treated traditionally (antiplatelet or heparin) or not at all, it is linked to a death rate of 50 to 90% [10]. If you survive, you're likely to get locked-in syndrome, which is the most gruesome ending you can imagine. Caudal vertebrobasilar, The types of mid-basilar, upper, and lower side thrombosis are all different, with the former being largely atherothrombotic and the latter being embolic [11] A number of case reports The first research on intra-arterial (IA) and less frequently intravenous thrombolytic treatment for Basilar Arterial Thrombosis was published in 1982 by at Zeumer [12]. The majority of studies had small sample sizes, with only a handful having between 40 and 50 patients. Everyone had an open mind With different treatment regimens, largely IA thrombolytic medications, and a retrospective or partly planned design, level evidence is at best [13].

3. CONCLUSION

Patient was admitted to cardiology ward in hospital with known case of arterial thrombosis and he had complain of fever chest pain and also pain in lower limb. After getting appropriate treatment his condition was improved.

Intra-arterial thrombosis is one of the most prevalent causes of death in the elderly, and it is thought to be produced by the formation of fatty layered tissue inside the artery, such as cholesterol. Smoking, overweight, and drinking are additional factors that promote intra-arterial thrombosis. After getting therapy, my patient's condition significantly improved, and the treatment was continue until my final day of care.

CONSENT

As per international standard or university standard, patient's consent has been collected and preserved by the authors.

ETHICAL APPROVAL

Ethical clearance taken from institutional ethics committee.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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