



Importance of Prophylactic Measures in Preventing Deep Vein Thrombosis in Trauma Patients

Pollam Ruzi*

Department of General Cardiology, Institute of Cardiology, Warszawa, Poland

DESCRIPTION

Deep Vein Thrombosis (DVT) is a common complication in trauma patients. It occurs due to the interruption of blood flow in the deep veins of the legs, leading to the formation of blood clots. These clots can cause serious problems such as Pulmonary Embolism (PE), which is the blockage of blood flow to the lungs, and can be life-threatening. As a result, deep vein thrombosis prophylaxis has become an important aspect of the care of trauma patients. In this essay, we will discuss the different prophylactic measures used to prevent DVT in trauma patients.

Overview of trauma patients and deep vein thrombosis

Trauma patients are at an increased risk of developing DVT because of various factors, including prolonged immobilization, tissue damage, and activation of coagulation pathways. Additionally, trauma patients may have other risk factors for DVT, such as obesity, age, and pre-existing medical conditions like hypertension and diabetes.

The incidence of DVT in trauma patients can vary widely depending on the population studied, the severity of trauma, and the prophylactic measures used. For example, a study conducted by Geerts found that the incidence of DVT in trauma patients without prophylaxis was 58%, whereas the incidence was reduced to 28% in patients receiving prophylaxis. Another study conducted by Knudson found that the incidence of DVT in trauma patients was 20.3% without prophylaxis and 3.3% with prophylaxis.

Prophylactic measures for DVT in trauma patients

Several prophylactic measures are used to prevent DVT in trauma patients. These measures can be broadly divided into mechanical and pharmacological prophylaxis.

Mechanical prophylaxis: Mechanical prophylaxis involves the use of external devices that promote blood flow and prevent stasis in the deep veins of the legs. The most commonly used devices for mechanical prophylaxis are compression stockings, intermittent Pneumatic Compression (IPC) devices, and venous foot pumps.

Compression stockings are elastic stockings that exert pressure on the legs, promoting blood flow and preventing stasis. They are relatively inexpensive and easy to use. However, their effectiveness is limited in trauma patients due to the presence of wounds and fractures that can interfere with their application and adherence.

IPC devices are inflatable sleeves that are wrapped around the legs and connected to a machine that delivers intermittent pressure to the sleeves. The pressure promotes blood flow and prevents stasis in the deep veins of the legs. IPC devices are effective in preventing DVT in trauma patients and are often used in combination with pharmacological prophylaxis.

Venous foot pumps are devices that promote blood flow by applying pressure to the soles of the feet. They are effective in preventing DVT in trauma patients, but their use is limited by the need for proper application and the patient's ability to use them consistently.

Pharmacological prophylaxis: Pharmacological prophylaxis involves the use of anticoagulant medications that prevent the formation of blood clots. The most commonly used anticoagulants for DVT prophylaxis in trauma patients are Low Molecular Weight Heparin (LMWH) and Unfractionated Heparin (UFH).

LMWH is a synthetic form of heparin that has a longer half-life than UFH and can be given once or twice daily. It is effective in preventing DVT in trauma patients and has a lower risk of bleeding than UFH. LMWH is often used as the first-line prophylactic measure in trauma patients.

Correspondence to: Pollam Ruzi, Department of General Cardiology, Institute of Cardiology, Warszawa, Poland, E-mail: Pollamruzi@gmail.com

Received: 22-Feb-2023, Manuscript No. JTCOA-23-20620; **Editor assigned:** 24-Feb-2023, PreQC No. JTCOA-23-20620 (PQ); **Reviewed:** 10-Mar-2023, QC No. JTCOA-23-20620; **Revised:** 17-Mar-2023, Manuscript No. JTCOA-23-20620 (R); **Published:** 27-Mar-2023, DOI: 10.35248/2572-9462.23.9.220

Citation: Ruzi P (2023) Importance of Prophylactic Measures in Preventing Deep Vein Thrombosis in Trauma Patients. *J Thrombo Cir*.9:220.

Copyright: © 2023 Ruzi P. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.