**Pathophysiology**

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1. Chronic venous insufficiency (CVI) is the disorder that happens when the venous valves or wall do not work efficiently in the leg veins. It creates difficulty for the blood to flow into the veins of the. CVI is impaired venous return that results in skin changes, discomfort, and edema. Deep vein thrombosis (DVT) is the preventable cause of mortality and morbidity. The symptoms of DVT include swelling and pain in legs and venous ulcer in some of the cases. The causes of the DVT include; hypercoagulability, stasis or low blood flow, and vessel wall damage. To diagnose CVI duplex ultra sound and measure of blood pressure in legs are taken while to diagnose DVT ultra sound along with physical and history assessment is used. About forty percent of Americans face issue of CVI (Quist-Paulsen et al., 2010). On the other hand, one out of thousands American face DVT issue where number of cases remain undiagnosed. The treatment of the DVT include heparin, warfarin, and elevate legs whereas patient with CVI should take treatment according to their nature and severity of disease.
2. Venous thrombosis is the blood clot known as thrombus that develops within a vain. Thrombosis is the term that is used to define the blood clotting within a blood vessel. Arterial thrombosis is also defines the blood clotting but occurs in an artery. The common type of the venous thrombosis is deep vein thrombosis (DVT) while common type of arterial thrombosis is the chronics venous insufficiency (CVT). Both types of blood clotting occur in legs but with different symptoms and complications. Venous thrombosis is kind of inflammatory reaction where white blood cells are crucial for the resolution of venous clots (Eberhardt Robert T. &Raffetto Joseph D., 2014). In case of arterial thrombosis blockage occur with the artery which make difficult for blood to circulate freely. If the piece of blood clot breaks into the pieces it enters into the lungs through right side of the heart which can create more complication in patient’s health. On the other hand arterial thrombosis makes artery narrow and hard which create difficulties for heart to work property. If the disorder gets diagnosed on time that is from artery clotting can be removed however breakage of clotting into pieces is difficult to be treated.
3. The factor which causes chronics venous insufficiency is the arterial thrombosis which damages the valve. The formation of clotting occurs when patient is not regular with his physical activities. Lack of exercise and flexibility in the muscles make artery harder and blood circulation get effected. When the blood does not find its way to circulate it transform into clotting which results in blocking with the artery. In addition history assessment is crucial that impact the pathophysiology of CVI (Min et al., 2016). If the patient had heath issue related to the blood pressure it might narrow the case and treatment of the patient. For the patient of the deep vein thrombosis the factor causing it is venous thrombosis which makes vein narrow and hard. The health and background assessment play vital role to understand the case of the patient because sometimes the issue can be genetically transferred which requires different treatment. In addition, symptoms like pain and extremely redness should not be neglected by the patient.
4. The patient can identified the issue when he feels a constant pain and dark skin area in legs. He should make an immediate treatment and checkup is required as soon as he noticed the issue. To diagnose the CVI measuring blood pressure and duplex ultra sound is necessary. These two methods are significant to know the details of CVI. In addition if the artery is not allowing the blood circulation it mean patient has CVI. Treatment is different for every patient according to the condition of the leg or disease (Patel &Surowiec, 2019). On the other hand, for the patient of DVT ultra sound, health assessment, and history is crucial to diagnose the disease. If the patient facing issue of redness and pain in that area then there is the maximum chances that he has DVT. For the treatment proper exercise and therapy is useful. The other treatments for the DVT patients include Heparin and elevate legs.
5. **Mind Maps**

Physical and history

Ultra sound

Pain

**Deep Venous Thrombosis**

Extremely redness

Obstructs blood flow

Vessel damage

Elevate legs

Various cases remain undiagnosed

Warfarin

Heparin

Annual incident of about one in thousands people

**Chronic Venous Insufficiency**

Backflow of blood

Valve damage

Pathophysiology

Obstruct the flow

**References**

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