

Deep Vein Thrombosis:

Literature Review

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## DEEP VEIN THROMBOSIS

### **Deep Vein Thrombosis**

Deep vein thrombosis, or DVT's, develop when a blood clot forms in one of the deep veins of the body (Deep Vein Thrombosis | DVT, 2019). A DVT develops in weak veins that lack blood flow. Throughout studies, researchers found many risk factors contribute to the development of a DVT, "Two of the most common are experiencing an injury to your lower body and having surgery that involves the hips or legs" (Deep Vein Thrombosis, 2019, pg.1). Since a DVT can lead to other serious medical complications, it is important to treat it quickly. Due to the fact that many clients present as asymptomatic, "Doctors will focus on preventing the development of DVT using different types of therapies, depending on the patient's needs" (Deep Vein Thrombosis, 2019, pg.1). Deep vein thrombosis can result in life-long health issues; therefore, it is important to follow the orders given by the doctor providing the care.

### **Current practice of venous thromboembolism prevention in acute trusts: a qualitative study**

In this article, researchers discuss the different ways to prevent venous thromboembolism, or VTE, by conducting a qualitative study. Throughout the study, it can be seen that, "Venous thromboembolism is a substantial healthcare problem, resulting in mortality, morbidity and economic cost" (Fitzmaurice, Harrison, Heneghan, McFarland, Murray, Ward, & Greenfield, 2015, pg.1). Research has proven that taking prevention steps will help lower the chances of acquiring a VTE. This study provides important insights on how healthcare providers can better prevent the VTE's.

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### **Key Points**

This study mainly focuses on the ability of healthcare providers taking the necessary steps to aid in preventing VTE's. When conducting the research, they focused on the following main themes, "Current attitudes to risk assessment, staff education and training, specific training requirements in acute care, lack of skills, critical dose clarity and budget implications" (Fitzmaurice, Harrison, Heneghan, McFarland, Murray, Ward, & Greenfield, 2015, pg.2). They found that many providers felt as if it was not their responsibility to carry out a risk assessment and preventative treatment (Fitzmaurice, Harrison, Heneghan, McFarland, Murray, Ward, & Greenfield, 2015). The article continues to discuss how better education can aid in the prevention of acquiring a VTE. Providers that are educated can take the necessary precautions to avoid the formation of a DVT. Some preventions include, "Wearing special elastic stockings or inflatable boots. These devices squeeze the muscles to help keep blood flowing. [Patients] may need to wear them until [they] leave the hospital. [Patients] may be urged to get up and walk around soon after the procedure. [Patients] feet or the foot of [their] bed may be raised" (Women's Health Care Physicians. 2019, pg.1).

### **Assumptions**

The researchers assume that acting early will help to prevent the development of VTE's. During this study, it was hypothesized that if healthcare providers were to focus on the previously listed key points there would be a decrease in the number of patients that acquire a VTE. Researchers were able to assume that the problem occurs when healthcare providers do not

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take, “any action based on the risk assessment” (Fitzmaurice, Harrison, Heneghan, McFarland, Murray, Ward, & Greenfield, 2015, pg.1). Throughout the study, researchers assume that the implication of a risk assessment can help to prevent this dangerous medical issue.

### **Deficit/Conclusion**

The study, “Highlights the importance of continuous training to prevent VTE risk assessment being considered a tick box exercise and for clinicians to understand the significance of the procedure to ensure that VTE preventative measures are administered” (Fitzmaurice, Harrison, Heneghan, McFarland, Murray, Ward, & Greenfield, 2015, pg.1). The researchers concluded that conducting risk assessments is essential in order to provide the best care to patients. This study shows the importance in teamwork and accountability. Researchers believe that it is a team effort, and the responsibility of the entire healthcare team to provide and act on conducted risk assessments.

### **A Qualitative Study to Appraise Patients and Family Members Perceptions, Knowledge, and Attitudes towards Venous Thromboembolism Risk**

In this study, researchers aimed to examine the, “Perception, knowledge and concerns developed by patients and their family as regards venous thromboembolism (VTE) risk” (Couturaud, F, Haxaire, C., Leroyer, C., & Tromeur, C, 2015, pg.1). The researchers conducted questions that would lead participants to provide a narrative of the perception of the illness. This study showed that healthcare providers should collect the perceptions of VTE formation from patients in order to better assess them during the health education process. If healthcare providers were to implement this prerequisite by assessing the risk factors, it will aid in avoiding a

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reoccurring episode. However, if healthcare providers do not implement this prerequisite the recurrence of VTE's are more likely.

### **Key Points**

This study mainly focuses on patients who had an unprovoked VTE at a young age and how their family can play a role in the development. This study states that, "Eligible patients had: (1) either the factor V Leiden or the G20210A prothrombin gene mutation abnormality or not; and (2) an episode of symptomatic PE or an episode of symptomatic isolated proximal DVT. Patients' family had to consist at least of one parent and of one sibling" (Couturaud, F, Haxaire, C., Leroyer, C., & Tromeur, C., 2015, pg.3). During the interview, researchers worked to build a record of their illness by having the patient, "stress their perception of the disorder, its mechanisms, etiology, circumstances, and risk factors" (Couturaud, F, Haxaire, C., Leroyer, C., & Tromeur, C., 2015, pg.3). After conducting the interview, researchers stated that, "Construction of the risk of VTE is based on patient's initial experience and shared within the family" (Couturaud, F, Haxaire, C., Leroyer, C., & Tromeur, C., 2015, pg.2). It can be seen from this study that healthcare providers should collect perceptions of VTE episodes in order to fully assess the risk of VTE and better understand the episode.

### **Assumptions**

Researchers assume that patients with "A first unprovoked VTE at young age and no detectable inherited thrombophilia are likely to have an unknown thrombophilia" (Couturaud, F, Haxaire, C., Leroyer, C., & Tromeur, C, 2015, pg.3). In order to clarify, "thrombosis is an inherited condition that increases the risk for DVT" (Bowers, E. S., 2014, pg.1). This condition

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occurs when our blood coagulates and causes blood clots. This assumption is a key assumption that allows providers to see the importance of properly assessing patients.

### **Deficit/Conclusion**

Throughout this study, the main points are to understand and assess the risk factors of a VTE in order to avoid potential or further occurrences. The researchers state that new practices have been implemented in order to help patients and families understand unprovoked VTE and the potential reoccurrence. Many clinics have “Implemented their clinic a support service that consists in dedicated appointments, taking place one month after the VTE episode and managed by a team of physicians and nurses” (Couturaud, F, Haxaire, C., Leroyer, C., & Tromeur, C., 2015, pg.11). The research also proves that it would be beneficial if family members were aware of the risk factors that come with a reoccurring VTE.

### **Long-term psychosocial impact of venous thromboembolism: a qualitative study in the community**

This study is used to show that VTE's are more than a physical threat. After research, it was shown that patients who suffer from a VTE suffer both physically and psychologically. Research shows that, “Psychological distress among the chronically ill is associated with a range of adverse consequences, including reduced adherence treatment, increased symptom burden and elevated levels of disability and death” (Fitzmaurice, Harrison, Heneghan, McFarland, Murray, Ward, & Greenfield, 2014, pg.1).

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### **Key Points**

This study focuses on the long-term impact of a VTE. The aim of the study is to better understand how VTE's affect patients over the first year. The researchers used participants who had, "Experienced a first-time VTE and participated in qualitative interviews 3 months previously" (Fitzmaurice, Harrison, Heneghan, McFarland, Murray, Ward, & Greenfield, 2014, pg.1). During the research, "Four themes were identified: life changing and forever changed, the trauma of care, 'thrombo-neuroses' and through adversity comes growth" (Fitzmaurice, Harrison, Heneghan, McFarland, Murray, Ward, & Greenfield, 2014, pg.1). It can be seen throughout the research that participants who have a VTE are forever affected by it. The researchers discuss that patients can see impairment both physically and psychologically (Fitzmaurice, Harrison, Heneghan, McFarland, Murray, Ward, & Greenfield, 2014).

### **Assumptions**

The researchers assumed that patients who suffer from a VTE will not only have physical side effects but will also suffer psychological damage. The researchers discuss that, "Participants reported significant levels of anxiety with many experiencing ongoing symptoms of trauma including intrusive thoughts, flashbacks and hypervigilance" (Fitzmaurice, Harrison, Heneghan, McFarland, Murray, Ward, & Greenfield, 2014, pg.6). The previous quote can confirm the assumption that psychological damage is also present in patients that have developed a VTE. Researchers also assume that, "It is important to consider that VTE may impact a young person's development, with consequences for their emerging sense of identity" (Fitzmaurice, Harrison, Heneghan, McFarland, Murray, Ward, & Greenfield, 2014, pg.7). If the research is implemented then healthcare providers will incorporate more support for patient's physiological health following a DVT (Bashir, N., Boharoon, H., Ellahham, S., Raji, S. J, & Taha, H., 2015).

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### **Deficit/Conclusion**

The data from this research shows the psychosocial impact of VTE and how they can cause physical and psychological issues. The researchers state that many patients, “Report being forever changed by the experience” (Fitzmaurice, Harrison, Heneghan, McFarland, Murray, Ward, & Greenfield, 2014, pg.1). The study also showed that patients had a higher rate of anxiety and struggled to find personal identity (Fitzmaurice, Harrison, Heneghan, McFarland, Murray, Ward, & Greenfield, 2014). In order to help treat the patients impacted by a VTE, researchers suggest that clinical interventions are used to better assess a patient’s risk factors and side effects.

### **Conclusion**

DVT’s are serious health complication that can lead to many other complications both physical and psychological. These journal reviews discuss how healthcare providers can better prevent the development of a DVT and how we can better assess the risk as well as the complications of a DVT. Most hospitals, “Encourage patients to get up and walk as soon as possible after surgery. Always be sure to follow all post-operative instructions carefully” (Admin., 2018, pg.1). The previous source gives an example of a prevention steps that can be used when assessing for DVT’s. It can be seen in a different source that, “I the signs are noticed early, a DVT can be safely treated by your healthcare provider” (You are at risk for DVT! | CDC., 2018, pg.1). Researchers also used patients’ own experiences to improve assessment methods. The previous method showed the psychological effects of a DVT. It can be seen throughout these reviews that although VTE’s are dangerous and life-threatening, with the right assessment and care they can be prevented.

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