

Miah Hernandez

Quality Improvement Activity: Deep Vein Thrombosis (DVT) post Open Reduction Internal Fixation (ORIF)

On a Friday evening, a 17 y/o male presented to the Emergency Department via ambulance with a right leg open fracture that he sustained while playing in his last high school football game. Upon his arrival in the ED the patient is crying out in pain and shouting, "We should have won, if I didn't get hurt, we would have won." The nurses and staff quickly assess and get the patient prepped and ready for surgery resulting in open reduction internal fixation. The surgery was a success, and the patient is set to have a good outcome and recovery. The patient is now recovering in post op with vitals and labs all within normal limits. Once sedation has worn off and the patient comes through, it is noticeable that the patient is upset and frustrated with his situation. He has verbalized multiple times to various nurses and his parents that football is his life, and he feels like losing the game was all his fault. The patient begins to fall into a depressive, non-cooperating phase. In his stay at the hospital, he has refused to work with physical therapy and has refused his Enoxaparin shot. The nurses don't want to upset the patient further, so they comply with his request. 3 days post-op the patient complains of throbbing, swelling, and warm skin in his affected right leg. A DVT is suspected, and the nurse notifies the physician, and the physician orders a duplex ultrasonography for conformation. Once the diagnosis of the DVT has been confirmed the physician has ordered for the patient to be started on anticoagulant therapy. The physician visits with the patient, parents, and nurse at bedside to go over his care plan and to emphasize the important of the treatment and how the patient needs to comply with medications and physical therapy to prevent the DVT worsening and becoming a pulmonary embolism (PE). The patient comprehends what is asked and agrees to comply and said he is not as upset anymore about his football game since he has had time to calm down and relax. The patient also apologized for being non-cooperate to the nurse, and the nurse responded by apologizing by not pushing harder and being an advocate for her patient. The treatment plan follows through, no PE was developed, and a year later the patient was training with a college football team.

Describe the scenario. In what way did the patient care or environment lack? Is this a common occurrence?

In this scenario what patient care that lacked was the nurse not advocating for the patient. When the patient became difficult to deal with the nurse rather take the easy way out instead of trying to ration with the patient in trying to get him to comply with his care. I feel like sometimes this is a common occurrence in the health care field. Nurses have anywhere from 3-5 patients with a great deal of task and care to give and for one patient to hold up that process, they would rather brush aside the difficult patient, so they don't take up much of their time.

What circumstances led to the occurrence?

What led to this occurrence was the patient feeling a roller-coaster of emotions and being an adolescent, didn't really handle those well. To most teenager males, high school and sports are their life. So once this possible career ending injury occurred, to this patient he probably thought his life was over. With his non-compliance to physical therapy and medication resulted in a DVT.

In what way could you measure the frequency of the occurrence? (interviewing nurses, examining charts, patient surveys, observations, etc.)

To measure the frequency of occurrence I could review past charts with the same surgery and see the outcomes of those patients and the treatment selected. With prevention of DVT in ORIF, the most common is ambulation or active range of motion techniques because the number one reason for DVTs post-op is prolonged periods of staying in bed.

What ideas do you have for implementing interventions to address the problem?

- Compression stockings
- Exercises
- Ambulation
- Anticoagulants

How will you measure the efficacy of the interventions?

To see if the interventions were effective, review multiple patients with ORIF and seeing their post-op recovery and outcomes. If the interventions are successful, DVTs post ORIF will be minimal.