

### **Quality Improvement Activity: Wound Dehiscence**

#### History:

26-year-old patient is admitted for a bowel perforation and rushed to surgery. After a successful correction of the bowel the patient is admitted for observation. On the day of discharge, A student following the patient's nurse observed discharge teaching and care. The student observed the nurse as she performed wound care on the insertion site that was not aseptic. The nurse was caring for five patients that day and seemed to be in a rush to get around to everything. She then proceeded to give discharge instructions to the patient. The patient was foreign and spoke very little English. She went on a completed discharge anyway. She handed this patient a packet with all the instructions and told him to pick up his medications from the pharmacy. She explained the need to follow up if "things aren't healing right" but failed to explain what to look for. She also failed to emphasize on the importance of completing the whole course of prophylactic antibiotics. There was no teaching on how to care for the wound or things to avoid.

#### Upon arrival to the ER 10 days post-op:

A 26-year-old male arrived to the emergency department via EMS with an abdominal wound dehiscence. Upon inspection of the wound, there was a moderate amount of purulent drainage around the area. The patient also presented with a fever of 101.6 F. The patient states that he was at the gym earlier today and started to hurt a little so he went home to get some rest. After taking a shower his pain got worse and realized his wound seemed to be getting worse instead of healing, so he applied ointment like he had been doing every day. When the nurse in the ER asked the patient if he was currently taking any medications, he stated that he took an antibiotic for two day but discontinued the medication due to a new onset of diarrhea. The doctor ordered blood cultures and lab work. When the results arrived, it was confirmed that the surgical wound was infected with staphylococcus. It was determined that that the poor wound care, strenuous exercise and not completing the antibiotics prescribed led to an infection that resulted in wound dehiscence.

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

In the scenario above the patient arrived to the emergency department 10 days after abdominal surgery with a wound dehiscence that was infected with Staphylococcus. The patient should have been provided with better discharge teaching at the time of discharge. The patient is also foreign and spoke very little English and should have been provided an interpreter for better communication and understanding of the discharge instructions. Very often we find that patients at the hospital are not provided proper instructions in their native language. This patient should have also received written instructions in their language. Unfortunately, we don't often see this happening at the hospital.

#### **What circumstances led to the occurrence?**

The circumstances that directly led to the surgical wound dehiscence would fall back on poor discharge teaching for care and preventions.

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

The frequency of wound dehiscence is constantly being reviewed at the hospital by performing proper assessments at the beginning of every shift and throughout rounding of the patients. Any time a nurse turns a patient or assists the patient to the restroom they should be putting their eyes on the wound. As nurses we should also be making sure to wash our hands and instruct the patients to do so as well when handling care for the wound. These are all things that we should be looking for in a hospital setting, but we should also be doing good thorough teaching at the time of discharge so that the patient is knowledgeable on how to care for the wound at home and also on prevention of infection whether it be with completion of antibiotics or good hand hygiene.

**What evidence-based ideas do you have for implementing interventions to address the problem?**

Hand hygiene has significantly been proven to reduce infections on any invasive procedure. Furthermore, the completion of all prophylactic antibiotics also significantly reduces the chances of infection recurrence and antibiotic resistant infections that can lead to or result from wound dehiscence. Thorough assessments also gives the nurse a view of proper healing or worsening of a wound.

**How will you measure the efficacy of the interventions?**

Measuring the efficacy of these interventions can be accomplished by giving a limit of an acceptable amount of wound dehiscence sites which should be close to zero and make the nurses accountable for the occurrence of these. We should also make sure that the patient understands the discharge instructions and they are able to teach back on instructions for a decrease in wound dehiscence occurring after discharge.