Pressure Ulcers eCourse

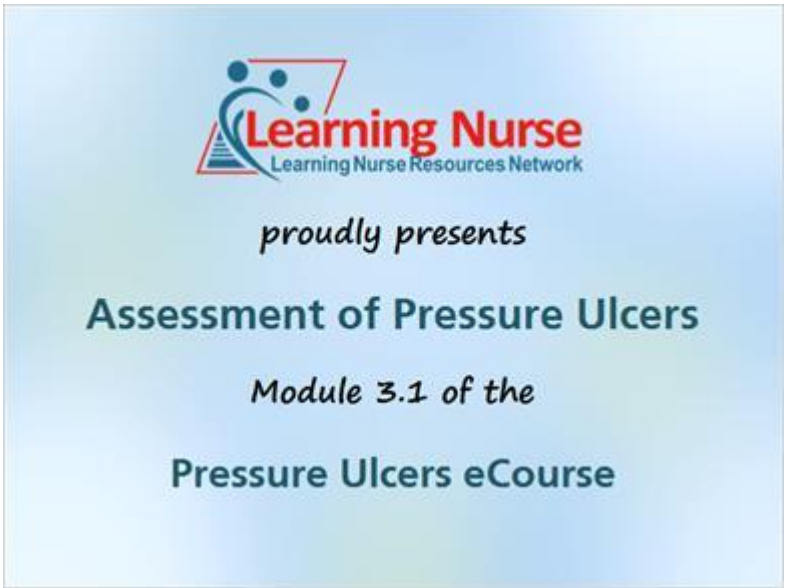
Module 3.1: Assessment of Pressure Ulcers

Handout

Assessment of Pressure Ulcers

1. PU Assessment

1.1 Welcome



Narration

No narration, only music.

1.2 Topics

Narration

JILL: Hi … I'm Jill and back with me is Mark. In this module we will examine ways to assess patients and residents for pressure ulcers. This will be done in two parts … first, we will discuss how to prepare an individualized care plan, and also how to conduct a comprehensive skin assessment. In a second part, we will review some of the common tools available to identify those individuals at risk for developing pressure ulcers.

MARK: Sounds interesting. Let's get started!

1.3 Care Plan

Narration

JILL: Okay. One of the most important ways to prevent pressure ulcers is to identify those patients at risk for developing the condition. Healthcare organizations should have procedures in place to identify at-risk patients or residents as soon as possible after they enter the facility.

MARK: And prevention strategies should be implemented immediately for those identified as high-risk for developing pressure ulcers. Also, any at-risk individuals should be reassessed on a regular basis to identify any developing pressure ulcers.

JILL: Good point Mark. Regular reassessment is important because even the most stable patient can become at-risk for pressure ulcers, particularly in an acute setting or if they are immobile.

1.4 When to Assess

Narration

JILL: Let's begin by discussing the appropriate times to do an assessment. All at-risk patents should be assessed for pressure ulcers at admission. Afterwards, they should be assessed again at regular intervals, or when there is a significant change in their condition, such as surgery or a decline in health status.

MARK: I imagine the assessments and re-assessments should be comprehensive head-to-toe skin assessments.

JILL: Yes, that's right Mark. Also, the assessment should include the use of a validated risk-assessment scale. We will discuss risk-assessment scales in more detail in the next part of this module.

1.5 Where to Assess

Narration

MARK: I see that this slide shows the important places to check for pressure ulcers when doing a skin assessment on a patient or resident who spends a lot of her time sitting.

JILL: Yes, it is a good reminder.

1.6 Where to Assess 2

Narration

JILL: This slide shows us where to look for pressure ulcers on a patient or resident who spends much of her time lying down.

1.7 Admission

Narration

JILL: Doing an assessment for pressure ulcers at admission in acute care, long term care and home care settings is an important step towards prevention.

You should inspect and palpate for changes in: skin integrity … texture … temperature … consistency (such as bogginess or induration) … moisture and color changes.

1.8 Admission 2

Narration

JILL: Why don't you do the rest, Mark?

MARK: Sure, I would be happy to. In addition, you should look for non-blanchable erythema … which is redness that persists when fingertip pressure is applied on the skin, and edema … which is the presence of abnormally large amount of fluid in the interstitial space.

JILL: Another important reason to conduct a skin assessment at admission is to document any preadmission damage or conditions. Why is that important?

MARK: Well, three reasons come to mind. First is, that if the patient or resident already has a pressure ulcer, we need to start treatments immediately. Second, depending on where the pressure ulcer is located, this will impact on how we position the patient during their stay at the facility. The last reason is that it reduces our liability by documenting that the patient did not acquire the pressure ulcer while in our care.

JILL: Those are really good points Mark.

1.9 Time Periods

Narration

JILL: The time period involved for pressure ulcer assessment should be as soon as possible after admission for a pre-ulcer evaluation.

MARK: How often should we re-evaluate the patient for pressure ulcers after the initial assessment?

JILL: It partly depends on the type of patient. For acute care, you should reassess every 24 to 48 hours. Reassess sooner if the patient's condition changes or deteriorates.

In nursing homes with long term residents, the reassessments should be done weekly for the first month and then monthly unless the resident's condition changes or gets worse.

And for home care, the nurse should reassess the patient at every visit.

MARK: Okay, to summarize … acute care – every 24 to 48 hours … long term care – weekly and then monthly … and home care – every visit.

JILL: Yes, those are the recommended time periods for pressure ulcers assessments.

1.10 Reassessment

Narration

JILL: However, when it comes to skin integrity, this should be done much more frequently.

MARK: How frequently?

JILL: You should assess the patient's skin integrity and document it every shift or whenever the patient's condition changes. This should be done while doing regular assessments.

MARK: I'm not sure what you mean.

JILL: Well, for example, when listening to lung sounds inspect the back, sacral and coccyx area; when checking IV sites also check the patient's elbows.

MARK: Okay, that's makes sense. What else?

JILL: There are several other important considerations when doing a skin assessment. First, you should remove special garments, shoes, heel and elbow protectors, orthotic devices, restraints and protective wear during the skin inspection. You should pay special attention to areas where the patient lacks sensation to feel pain and where the patient has had a skin breakdown in the past.

1.11 Pressure Ulcer Assessment

Narration

JILL: Now let's turn our attention on how to assess any pressure ulcers that have developed.

MARK: What data should we be collecting and documenting?

JILL: The recommended pressure ulcer related information is listed on this and the next slide. These include: the site or location of the pressure ulcer; the stage or category of the pressure ulcer; the prevalence of any odor or smell from the wound; a description of the periwound skin; and the length, width and depth of the ulcer.

1.12 Skin Assessment 2

Narration

JILL: Continuing with the pressure ulcer information we should be collecting … description and measurement of any tunneling and undermining; signs of infection; assessment of related pain; and finally, a description of the wound appearance.

MARK: Are we going to examine each of these in a bit more detail so that we know exactly what we need to assess and document in each of these categories?

JILL: Coming right up!

1.13 Site or Location

Narration

JILL: The first bit of information we need to collect and document is about the site or location of the pressure ulcer. Anatomical location of the pressure ulcer is important because it affects the healing potential of the wound. This information must always be recorded in the patient's or resident's medical file.

MARK: I would think that the location of the pressure ulcer would also have an impact on how we handle and position the patient.

JILL: Yes, you are exactly right. For example, the location of the pressure ulcers will affect how we reposition the patient and how long we allow them to remain seated.

1.14 Stage or Category

Narration

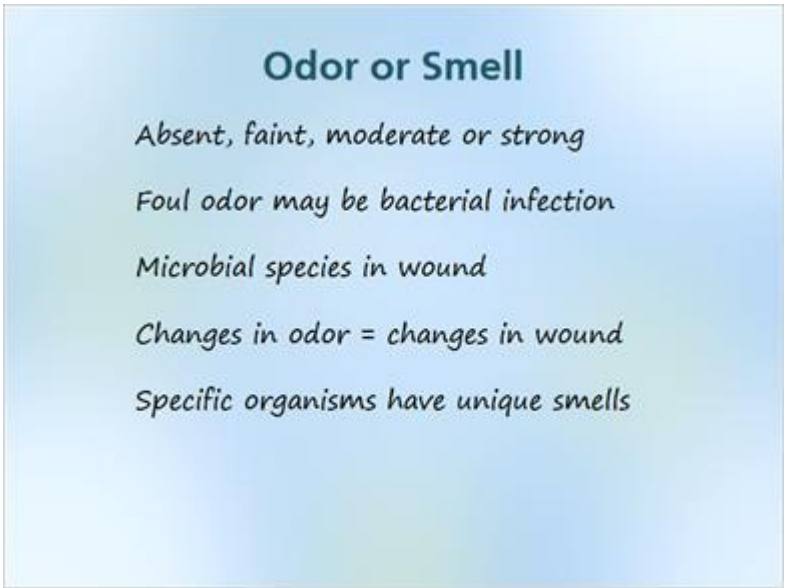
JILL: The next unit of information that we need to collect is the stage or category of the pressure ulcer. We covered pressure ulcer classifications quite extensively in Module 2. Care to discuss this one Mark?

MARK: Sure. It is important to determine and document the stage and size of the pressure ulcer so that appropriate interventions can be initiated. However, there may be several challenges in doing so.

It may be difficult to detect Stage I pressure ulcers in darkly pigmented skin or when eschar is present. Accurate staging is not possible until the eschar has been removed. In addition, pressure under casts, orthopedic devices and support socks are difficult to assess and require extra diligence.

JILL: Yes, good points.

1.15 Odor or Smell



Narration

JILL: The next category of information that we need to assess and document is odor or smell. Odor can be described as absent, faint, moderate or strong. The presence of purulent exudates accompanied by foul odor may suggest the onset of bacterial contamination and proliferation, with progression to clinical infection.

Assessment of wound odor is important as it relates to certain microbial species found in pressure ulcers. Changes in wound condition may be suspected if the amount and quality of odor changes. Contamination of the wound with specific organisms may be detected by their characteristic odors.

MARK: Are you saying that I can detect the type of bacteria in the wound by their smell?

JILL: Theoretically yes. But unless you have some bloodhound DNA in you, most humans don't have that acute a sense of smell.

MARK: Too bad. I thought that I might be able to develop another specialized diagnostic skill. (Laughs)

1.16 Periwound

Narration

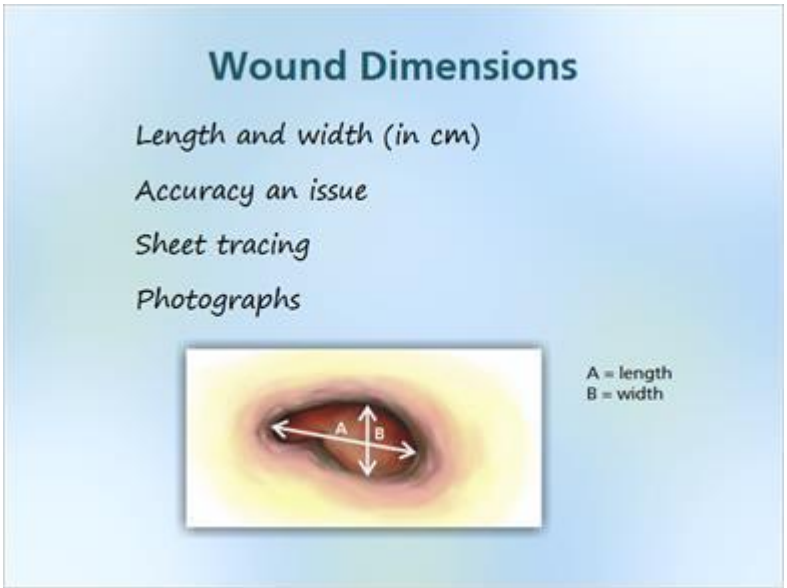
JILL: Periwound skin refers to the tissue immediately surrounding the pressure wound tissue. You should assess and document whether the periwound skin is intact, macerated, dry, indurated or erythemic. Indurated tissue is an indication of infection.

Mark, why do you think it is important to assess the periwound skin?

MARK: Examining the periwound skin and making a note of its appearance provides data related to wound healing. It is also an indication of the patient's or resident's overall health status. Finally, in my experience, the status of the skin surrounding the pressure ulcer will influence how I apply and remove dressings.

JILL: Very good.

1.17 Dimensions



Narration

JILL: The next category of data to collect is the dimensions of the wound. All measurements should be recorded in centimeters. Length of the pressure ulcer should be measured at the longest point and the width at the widest point.

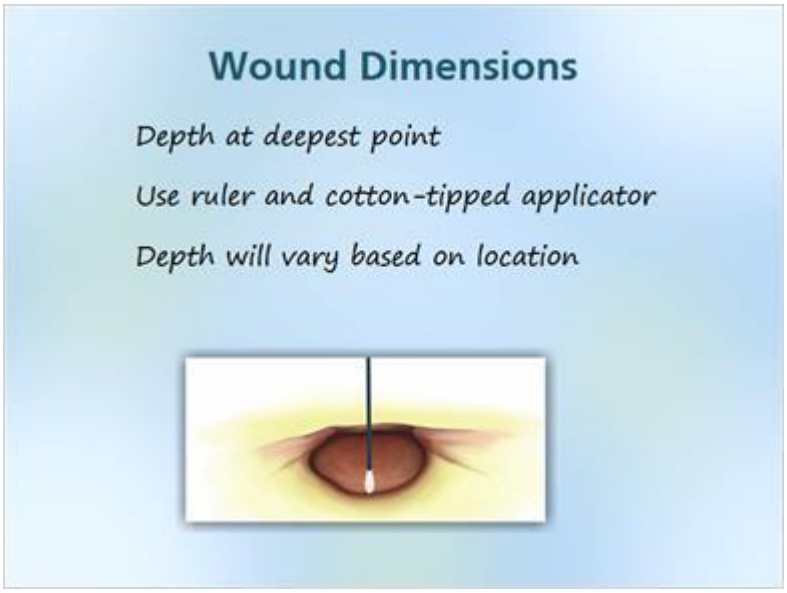
Inaccuracy may arise if the wound bed is not uniform or the wound edges are not distinct. Also the level of inaccuracy can increase when measurements are performed by different nurses.

MARK: With all the technology we have today, aren't there easier and more accurate ways to record the size of a pressure ulcer?

JILL: There are a couple of other options that are sometimes used. However, both have their limitations. One popular method of indirect measurement of the wound area is sheet tracing. A sheet of clear acetate film is placed directly onto the surface of the wound. The wound perimeter is then traced with an ink pen. The technique is time consuming, and if the wound is large, its size can be difficult to estimate.

Another option is to use photographs. However, accuracy will be affected by the location of the camera, and the zoom of the lens. In addition, there may be policies prohibiting the taking of photographs of patients and residents for privacy reasons.

1.18 Dimensions 2



Narration

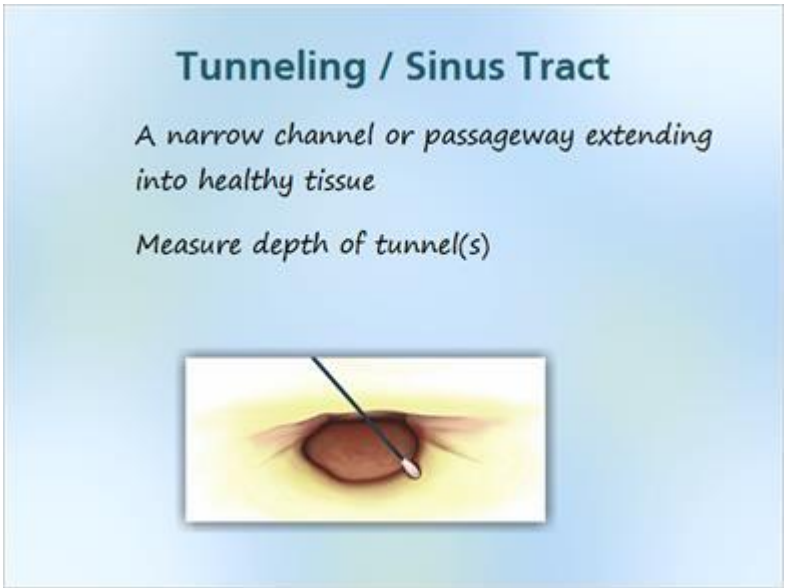
JILL: Mark, why don't you describe how to measure the depth of a pressure ulcer?

MARK: Sure, I would be happy to do that. It is important to measure the depth of a pressure ulcer at its deepest point. Measurement is done with a ruler or cotton-tipped applicator. Insert into the wound and record its deepest level.

Measuring the depth indicates whether the wound is full thickness, penetrating through the dermal layer of the skin, or partial thickness, affecting only the dermal layer. Stage III and IV pressure ulcers have full-thickness tissue losses. The depth will vary depending on the anatomical location. For example, pressure ulcers on the ear or thumb will likely be shallow.

JILL: Well done. Now let's take a look at measuring tunneling inside a pressure ulcer.

1.19 Tunneling



Narration

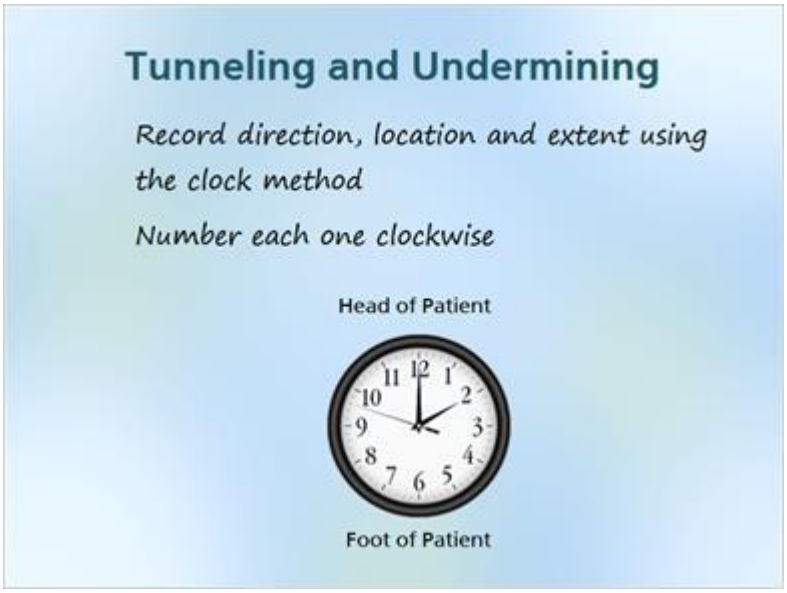
JILL: Tunneling refers to channeling that extends from any part of the wound and may pass through subcutaneous tissue and muscle. It may result in dead space and abscess formation. The depth of the tunnel should be measured with a sterile cotton swab and recorded.

1.20 Undermining

Narration

MARK: Undermining, on the other hand, is a tunneling wound that begins directly under the wound edge. It should be measured in the same way as tunneling.

1.21 Tunneling / Undermining



Narration

JILL: You should document the direction, location and extend of tunneling and undermining. Experts suggest using the clock method to record the information, for example 4 cm at 5:00. If more than one tunnel or undermining exists in the pressure ulcer, number each one clockwise.

MARK: Just to make sure that I'm clear on how to measure the dimensions of a pressure ulcer, here is the process as I understand it. First I measure the length and width. Then using a cotton-tipped applicator I measure the depth at the deepest point of the wound. I measure the length of all tunnels and undermining and record these using the clock method. All measurements are in centimeters. Is that right Jill?

JILL: Yes, it is Mark. The important thing to remember is to use the same method exactly each time so that the measurements will be consistent.

1.22 Infection

Narration

JILL: The next category of information that we must collect on a patient's pressure ulcer is whether there are any signs of infection.

MARK: Well, this should be simple enough. Aren't the symptoms the same as any infection?

JILL: Unfortunately no. Wound infections exhibit subtle differences when compared to the classical signs of infection.

MARK: Really, in what way?

JILL: Infected pressure ulcers present exudates with persistent inflammation, delayed healing, discolored or granulation tissue that bleeds easily, pocketing at the base of the wound and a strong odor.

1.23 Infection 2

Narration

JILL: So what do you think we should do if we suspect that a pressure ulcer is infected?

MARK: Probably the same as with any other infection. Take some samples and run laboratory and drug susceptibility tests.

JILL: That's right! Deep infection is a frequent complication of Stage III and IV pressure ulcers. The infection in these cases is characterized by an increase in warmth, tenderness and pain.

1.24 Pain

Narration

JILL: And speaking of pain that is the next category of data we need to collect and record when assessing pressure ulcers. Mark, what do you think are the factors that cause pain when a patient or resident has a pressure ulcer?

MARK: I expect that some of the factors are … pressure, friction and shear … perhaps damaged nerve ending … and inflammation.

JILL: Yes, those are all pain-causing factors. However, there are a few more.

1.25 Pain 2

Narration

JILL: Other factors responsible for pressure ulcer pain are … infection … the procedures we use to treat pressure ulcers and excoriation from incontinence and muscle spasms.

MARK: Since there many causes of pain due to pressure ulcers, I guess that means that we need to be diligence in assessing it in our patients and residents.

1.26 Pain 3

Narration

JILL: Yes, Mark. Pressure ulcer pain is a common complication that is often under-treated. Individuals with pressure ulcers experience pain that can be quantified and differentiated from other types of pain.

MARK: Really, how so?

JILL: Pressure ulcer pain can be constant and severe. It is the most distressing symptom individuals might report. Individuals with Stage IV pressure ulcers experience more pain than individuals with lower-stage ulcers.

MARK: So what is the best way to measure pressure ulcer pain?

JILL: The most reliable indicator of pain is the individual's report of pain. This suggests the use of your facility's validated pain scales. However, you should not assume that because a patient cannot express or respond to pain, it does not exist.

1.27 Appearance

Narration

JILL: This brings us to our final category of data that we need to collect when assessing pressure ulcers … wound appearance. Mark, why don't you start?

MARK: Okay. Document the appearance of the wound by assessing the color of the wound as a percentage of black, yellow and red. You should determine whether the pressure ulcer wound contains granulation tissue, which feels soft and spongy. Granulation tissue is the pink/red moist tissue comprising new blood vessels that fill an open wound when it starts to heal.

You should also determine whether the wound bed contains necrotic tissue and how much of the wound bed is covered with it. Necrotic tissue is gray, brown, black and moist.

1.28 Appearance 2

Narration

MARK: Continuing on … we also need to determine whether the necrotic tissue is slough, soft eschar or hard eschar. Slough tissue is yellow/white to gray in color. It may be stringy or thick and appear as a layer over the wound bed. Eschars are typically gray to black and dry or leathery. Dead tissue manifests as dark or black eschar on the wound or as yellow fibrinous material on the wound base.

The clinical appearance of necrotic tissue, such as color consistency, and adherence should be noted to determine the quantity and type of dead tissue. Yellowness in the wound bed indicates the presence of slough or fibrinous tissue. A red wound bed indicates the presence of granulation tissue. However, it is important to pay attention to the appearance and shade of red. Dark red may indicate infection, while pale red with spontaneous bleeding could be a sign of ischemia or infection.

JILL: As you can see Mark, the details that we document about the appearance of a pressure ulcer provide us with valuable clinical information.

1.29 Summary

Narration

JILL: This brings us to the end of the first part of Module 3. Mark, why don't you briefly summarize what we covered in this Introduction?

MARK: Sure. We started out by outlining what needs to be in an individualized care plan for individuals at risk of developing pressure ulcers. We discussed when and where to look for pressure ulcers. We then described the data that needs to be collected and recorded when assessing pressure ulcers. These are: the location, stage and odor … periwound skin and measuring the dimensions of the wound … tunneling and undermining and finally signs of infection, pain assessment and how to describe the appearance of the wound.

Did I miss anything?

JILL: No, that summarizes it pretty well. I'm Jill, along with Mark saying goodbye for now. We will see you shortly in the second part of this module where we will talk about pressure ulcer risk-assessment tools.

MARK: Bye.

1.30 The End

Narration

[No narration, just ending music]