

PROVING LIABILITY FOR NURSING FACILITY ACQUIRED PRESSURE INJURIES

By H. Micheal Wright

Introduction

The human body is not designed to stay in one position for prolonged periods of time. Patients in hospitals and residents of nursing or long-term care facilities, who are impaired and in need of assistance with bed or wheelchair mobility, are susceptible to developing pressure injuries on bony prominences of the body such as the coccyx, sacrum, and heels. Historically, such injuries have been referred to as decubitus ulcers, bedsores and pressure ulcers; the current term of choice is pressure injury.

Most nursing facilities have experienced having patients with these types of injuries, and claims for such injuries. State and federal regulations discourage them and facilities acknowledge the need for prevention and treatment of pressure injuries in their policies and procedures. And many medical malpractice attorneys have found such cases in their caseload, as they should, because these injuries are fairly common and almost always result from negligent nursing care.

In its advanced stage a pressure injury can be life-threatening due to infection; if the patient survives she will still face months of painful healing with surgery and usually be left with friable scar tissue that can reopen and become infected and the cycle repeats itself.

The Pathophysiology of Pressure Injury

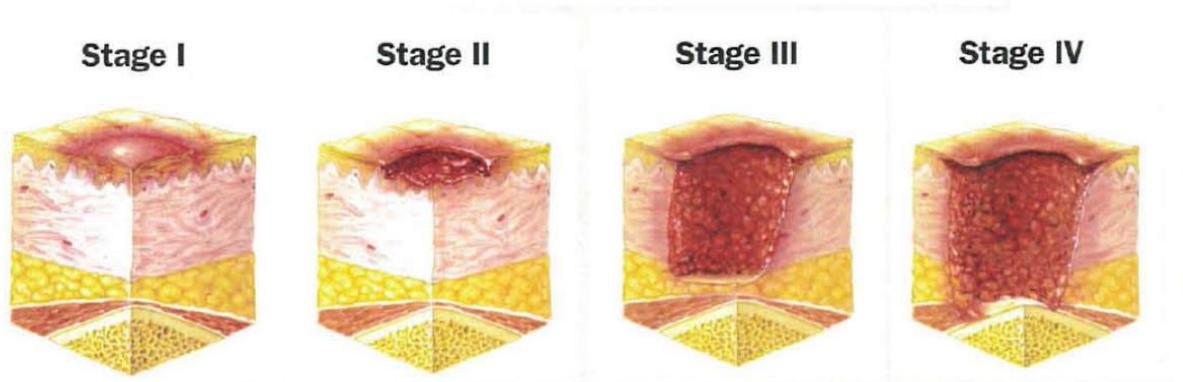
The basic mechanism that leads to pressure injury is well-known – pressure! Prolonged pressure compresses capillary flow between the skin surface and subcutaneous tissue (like a tourniquet effect), leading to death of skin and subcutaneous tissue. The degree of damage is a function of how long the compression lasts before restoration of blood flow, how much pressure there is, whether the compression is repeated frequently, how “healthy” the skin and tissue are (more on that later), and whether there is a shear or friction component to the pressure. The shear effect can be described as a sliding of tissue in a way that disrupts the vascular flow to the area, as illustrated here:



A patient who is thin is more susceptible to the effect of pressure than one who has more fleshy padding. And a patient who has some degree of poor blood perfusion or poor nutrition may develop injury faster. Patients with incontinence of bowel or bladder are at a higher risk than those without. The risk of pressure injury, taking these conditions into account, is part of the risk assessment profile that nursing staff should recognize.

Signs and Types of Pressure Injuries

Pressure injuries are assessed (and documented) in several ways that reflect the severity of the wound. One way is by “staging” the wound, as shown here:

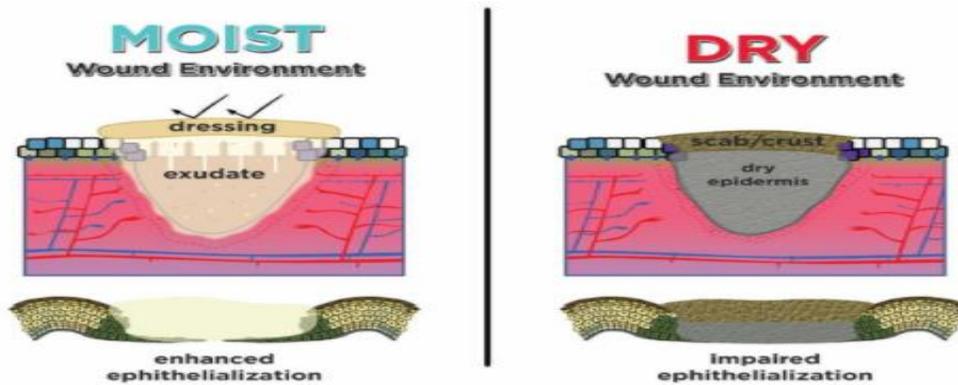


A Stage I pressure injury presents as a reddened area that is non-blanchable, meaning that if it is pressed with a finger it remains red. The skin in a Stage II injury is blistered or torn. Although Stage I or II injuries are not in themselves very serious, they portend a worsening if intervention is not implemented to offload the area and keep it clean and protected from moisture. Also, depending on the appearance of the area, such a finding may indicate deeper damage. A “deep tissue injury” is a different type of wound that is described *infra*.

A Stage III wound, as shown in the above illustration, has eroded into subcutaneous tissue and must be treated with wound dressing, cleaning, and, of course, daily assessment and relief of pressure off the wound, lest it continue to erode. There are various types of dressings that provide moisture to encourage healing; some are padded to enhance pressure relief. A barrier cream helps protect the skin around the wound from moisture and erosion. Given time, a Stage III wound will usually develop necrotic tissue -- this must be removed, because it is not viable and will not heal. Also, necrotic tissue invites infection.

A Stage IV pressure ulcer, many of which are eroded to bone, can be life threatening because of infection. Every Stage IV wound is infected – bacteria is endemic and a wound, especially a sacral wound, is contaminated with bacteria; a Stage IV pressure ulcer has been open for a long enough period to receive contamination where it is in proximity to stool and urine. More intensive treatment

includes debridement of necrotic tissue and wound edges to encourage healing of subcutaneous tissue and epithelialization.

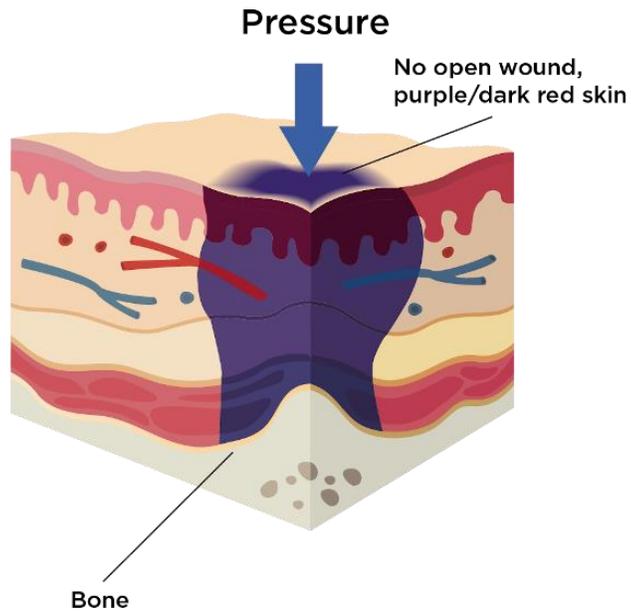


Often a wound vac device must be used to fill a Stage IV wound and keep the wound clean, removing bacteria, and encourage granulation tissue. This has the effect of producing new connective tissue and microscopic blood vessels that form in the surface of a wound during the healing process. Granulation grows from the base of a wound to fill the wound as healing occurs. It will take months for a Stage IV wound to heal. Repeated sharp debridement by a surgeon is usually required to promote wound healing by removing biofilm and devitalized tissue. Throughout this period the wound is vulnerable to infection, requiring an Infectious Diseases consult and close watch. Frequently a Stage IV wound will develop infection of the bone (osteomyelitis) and intensive antibiotic therapy is required with excision of bone. In many cases, infection will lead to sepsis and death.

In severe cases, once infection is cleared, a flap procedure may be done by a Plastic Surgeon. This requires skin and tissue to be stretched over the wound and sutured, leaving tender skin that is vulnerable to breakdown and dehiscence of the incision. With time, a successful flap procedure will set and the patient is safe from infection. This may take months to achieve. However, even if the patient survives a Stage IV infected wound through implementation of this painful, prolonged healing process, once the wound “heals” (closes) scar tissue remains that can be friable and tear easily. So, in effect, it is a permanent injury.

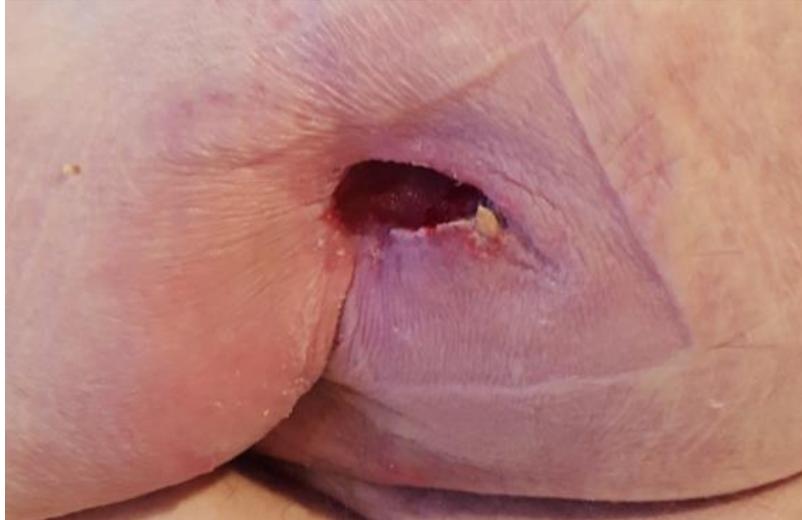
A type of pressure injury that differs somewhat from the classic surface-down ulceration is what is called a “Deep Tissue Injury” (DTI). This phenomenon occurs from more intense or prolonged pressure that causes damage near the bone and works its way to the surface to become a Stage IV ulcer. The defining characteristic of a DTI is a maroon or purple bruise that appears on the surface in an area of bony prominence that eventually opens in a concentric circular ulceration, unlike a classic pressure ulcer that will have a broader area of surface erosion and that starts with a Stage I reddened area that is non-blanchable. (See illustration below) Depending on the nature of the trauma, where pressure, combined with shear, friction, maceration from moisture along with

deep injury, the wound may present multiple features indicating a combination of deep and surface damage. This illustrates a DTI:



Examples of the difference between a standard Stage II -III pressure ulcer and a DTI are shown here:





The top photo shows a classic ulcer in which the wound bed is visible and pink as skin has eroded to the subcutaneous, probably a Stage II, possibly an early Stage III wound. One might argue that some bruising can be detected around the wound, but that is obviously skin bruising, and not deep bruising, given that where the wound is open there is no bruising in the bed.

The bottom photo shows the classic appearance of a DTI after it has opened – it initially appeared as a maroon or purplish bruise. The photo shows the deep damage after it has opened in a concentric hole without surrounding surface damage. The appearance of pressure wounds, including DTIs, declares the manner in which they occurred.

Also, the location of the wound can be important in matching it to the records of positioning of the patient. The top photo above is of a patient left in a supine position probably with a shearing component as his head of bed was in a 30-degree position, putting pressure on the sacrum. The bottom above photo is of a DTI on the left ischium. The records of positioning of the patient showed that she was left for long periods in a Fowler's or Semi-Fowlers upright position, consistent with the DTI in this location.

The autopsy photos below show the worst of a stage IV pressure ulcer, one that has been neglected for weeks. There is extensive necrotic tissue, the sacral bone is exposed with osteomyelitis, and there is extreme tunneling present. Sadly, the patient's demise was almost merciful in this case as a flap procedure would not work – too much tissue is lost for it to heal.



The Nursing Standard of Care – Assessment and Planning

The basic formula in the nursing process applies to the prevention of pressure injury. This includes (1) assessment, (2) planning, (3) intervention, and (4) documentation. The initial risk assessment considers the patient's mobility and other comorbidities that bear on the chance of skin breakdown. Most facilities utilize the Braden Scale to score the risk of skin breakdown. An exemplar Braden Scale is attached hereto; it measures sensory perception (paralysis), moisture, activity level, mobility, nutrition status, and likelihood of friction and shear. A high score denotes a lower risk and vice versa. The Care Plan should reflect the Braden Score risk assessment by dictating the interventions to be implemented.

Braden Scale-Table 7-4

Braden Risk Assessment Scale

NOTE: Bed and chairbound individuals or those with impaired ability to reposition should be assessed upon admission for their risk of developing pressure ulcers. Patients with established pressure ulcers should be reassessed periodically.

Patient Name:	Room Number:	Date:			
Sensory Perception	<p>1. Completely Limited Unresponsive; does not respond. Head or grasp to painful stimuli; does not demonstrate level of consciousness or reaction. Care limited ability to feel pain over most of body surface.</p>	<p>2. Very Limited Responds only to painful stimuli. Cannot communicate discomfort except by moaning or restlessness. Care has a source of regular pain which limits the ability to feel pain or discomfort over 1/2 of body.</p>	<p>3. Slightly Limited Responds to verbal commands, but cannot always communicate discomfort or need to be repositioned. Care has source of regular pain which limits ability to feel pain or discomfort in 1 or 2 extremities.</p>	<p>4. No Impairment Responds to verbal commands. Has no sensory deficit which would limit ability to feel or voice pain or discomfort.</p>	<i>Include All Items in Braden Scale.</i>
Moisture	<p>1. Constantly Moist Skin is kept moist almost constantly by perspiration, urine, etc. Disruption is detected every time patient is moved or turned.</p>	<p>2. Very Moist Skin is often, but not always, moist. Lines must be changed at least once a shift.</p>	<p>3. Occasionally Moist Skin is occasionally moist, requiring an extra linen change approximately once a day.</p>	<p>4. Rarely Moist Skin is usually dry. Lines only require changing at routine linen care.</p>	
Activity	<p>1. Bedfast Confined to bed.</p>	<p>2. Chairfast Ability to walk severely limited or non-existent. Cannot bear own weight and/or must be assisted into chair or wheelchair.</p>	<p>3. Walks Occasionally Walks occasionally during day, but for very short distances, with or without assistance. Spends majority of each shift in bed or chair.</p>	<p>4. Walks Frequently Walks outside the room at least once a day and inside room at least once every 2 hours during working hours.</p>	
Mobility	<p>1. Completely Immobile Does not make even slight changes in body or extremity position without assistance.</p>	<p>2. Very Limited Makes occasional slight changes in body or extremity position but unable to make changes independently.</p>	<p>3. Slightly Limited Makes frequent through slight changes in body or extremity position independently.</p>	<p>4. No Limitations Makes major and frequent changes in position without assistance.</p>	
Nutrition	<p>1. Very Poor Never eats a complete meal. Rarely eats more than 1/3 of any food offered. Eats 2 servings or less of protein in each of daily meals for 5 or more days. Takes fluids poorly. Does not take a liquid dietary supplement. Care is given fluid of 1.5% for more than 3 days.</p>	<p>2. Probably Inadequate Rarely eats a complete meal and generally eats only about 1/2 of any food offered. Protein intake is usually only 1/2 range of usual or 1/2 protein per day. Occasionally will take a dietary supplement. Care receives less than 1000 cc of fluid per day.</p>	<p>3. Adequate Eats over half of most meals. Eats a total of 4 or more servings of protein in each of daily meals. Occasionally will eat a meal, but will usually take a supplement if offered. Care is on a tube feeding or 1 1/2% requirement which probably meets most of nutritional needs.</p>	<p>4. Excellent Eats most of every meal. Never refuses a meal. Usually eats a total of 4 or more servings of protein in each of daily meals. Occasionally eats between meals. Does not require supplementation.</p>	
Usual Food Intake Pattern	<p>1. Very Poor Never eats a complete meal. Rarely eats more than 1/3 of any food offered. Eats 2 servings or less of protein in each of daily meals for 5 or more days. Takes fluids poorly. Does not take a liquid dietary supplement. Care is given fluid of 1.5% for more than 3 days.</p>	<p>2. Probably Inadequate Rarely eats a complete meal and generally eats only about 1/2 of any food offered. Protein intake is usually only 1/2 range of usual or 1/2 protein per day. Occasionally will take a dietary supplement. Care receives less than 1000 cc of fluid per day.</p>	<p>3. Adequate Eats over half of most meals. Eats a total of 4 or more servings of protein in each of daily meals. Occasionally will eat a meal, but will usually take a supplement if offered. Care is on a tube feeding or 1 1/2% requirement which probably meets most of nutritional needs.</p>	<p>4. Excellent Eats most of every meal. Never refuses a meal. Usually eats a total of 4 or more servings of protein in each of daily meals. Occasionally eats between meals. Does not require supplementation.</p>	
Friction and Shear	<p>1. Problem Requires moderate to maximum assistance in repositioning. Frequent sliding against sheets is reported. Frequently slides down in bed or chair, requiring both reposition assistance. Separately, contractures or agitation lead to almost constant friction.</p>	<p>2. Potential Problem Moves freely or requires minimum assistance. Probably slides to some extent against sheets, chair seat, etc., or other devices. Maintains relatively good rest of the skin, but occasionally slides down.</p>	<p>3. No Apparent Problem Moves in bed and in chair independently, and begins to lift up completely during reposition. Maintains good position in bed or chair at all times.</p>		
<p><i>NOTE: Patients with a total score of 10 or less are considered to be at risk of developing pressure ulcers. 15 or 16 – low risk; 13 or 14 – moderate risk; 12 or less – high risk.</i></p> <p>©Copyright Doris Braden and Nancy Bergstrom, 1988.</p>				<p>Total Score:</p>	

Of course, if signs of a pressure injury develop, or the patient's condition changes, this must be assessed and documented. A Braden score should be repeated regularly to evaluate the need to revise the Care Plan. A skin assessment should be done every shift to check for signs of pressure injury (see *infra*), and the status documented. It is universally accepted that if a pressure injury is discovered, that a wound specialist consult be requested. Most long-term care facilities have a designated wound nurse or wound team that includes a physician or Nurse Practitioner familiar with evaluating the need for specialized wound care.

The Nursing Standard of Care – Interventions for Prevention and Treatment

The primary source of standards for skilled nursing and long-term care facilities is the CMS (Medicare and Medicaid) Surveyor Guidelines that accompany 42 CFR 483, specifically F-tag 314. The Guidelines are published by the American Health Care Association in a volume commonly referred to as the "Watermelon Book" because of its color. These standards define the standard of care and describe the process referred to herein. Another source commonly used by experts is the National Pressure Injury Advisory Panel (NPIAP). The NPIAP is sponsored by industry interests, so its publications are conservative and often cited by defense experts.

When a timely nursing assessment determines that the patient is at risk of developing skin breakdown, the primary intervention is to relieve pressure, also referred to as "offloading." There are several reasons why a patient may need assistance with pressure relief, including unconsciousness, lethargy, confusion, paralysis, or weakness. The standard frequency of repositioning is considered to be two hours, i.e, every two hours a nurse or aide is expected to assist the patient in offloading the sacrum, heels, or other bony prominence. Depending on the degree of the patient's mobility impairment, this should be done using a "lift sheet" rather than dragging the patient across the mattress, so as to prevent friction or shear injury that can contribute to skin breakdown. For patients with more impairment, two persons should assist in the repositioning to prevent shear injury with the use of a lift sheet.

If a patient is at risk of skin breakdown the standard of care requires that she be placed on a support surface that redistributes and ameliorates pressure. There are several types of specialty mattresses and beds. Most facilities will utilize (upon order from a physician) a low air loss mattress that employs air pumped into channels in the mattress to sort of buoy the patient afloat. Sometimes the facility will report that the patient was on an "air mattress" – but that may only consist of an air mattress not unlike a camping mattress filled with air. The highest quality support surface is a Clinitron bed that has a bead or sand filled surface; Clinitron also makes an air-fluidized bed. The cost of such beds prohibits their use in most situations. So, it is important to pursue discovery concerning the make and model of bed or mattress actually in place.

Proving Pain, Suffering and Cause of Death in Pressure Injury Cases

The primary exhibits useful in a pressure injury case are the wound photos – these tell much of the story of the case and reflect the negligence as well as the pain and suffering involved. Pressure injuries are painful, except in cases of paralysis without sensation, and the wound treatment, surgical debridement and the healing process itself wear on the patient unlike other types of wounds that quickly epithelialize. The most hurtful aspect of a Stage IV wound is infection; it takes time to rid the infection, requiring hospitalization for antibiotic infusion and the patient has to endure sickness from sepsis.

Proving the cause of death from the effects of a pressure ulcer is sometimes knotty because sepsis involves the spread of bacteria that can affect heart and lung function, and sometimes stroke from dissemination of emboli, presenting sort of a “chicken or the egg” proposition -- did the death occur due to sepsis from pneumonia, or from endocarditis, or from stroke or some other source apart from the wound? Or did these conditions generate from the infected wound? The longer the wound has been present, and the more severe the wound, the more likely it led to the conditions that were the immediate cause of death. An autopsy will help establish the pathogenesis, and an Infectious Diseases specialist may be needed to explain the causal relationship.

Analyzing the records to find negligence

The process described above of Braden assessment, care planning, reassessment, implementation of interventions, and documentation of all these, informs the basis for analyzing the medical records to look for negligence. If documentation is complete it will be easier to discover how and why the pressure injury developed. Was there a failure to recognize the risk of skin breakdown? Was the risk incorporated into the Care Plan? Did the patient benefit from frequent turning and repositioning? Was a two-person assist used? What was the status and course of the wound? Was a wound nurse or physician consulted on the case? What treatment was implemented, and was it timely?

A breach of the standard of care may be identified by the repositioning schedule found in the Activities of Daily Living (ADL) log. This log includes “bed mobility” activities in skilled nursing and long-term care facilities. Hospitals usually do not keep such a log and the frequency of repositioning is embedded in the nursing progress notes. Sometimes nurses merely note “repositioned” during the shift, so it is hard to determine the precise position and the frequency of positioning during the shift. If repositioning is not clearly charted, the plaintiff’s lawyer can exploit this and argue that the development of the wound speaks for itself and since there is no proof of the required standard offloading, that is why the injury developed.

It is important that not only the frequency of repositioning be analyzed but also the position the patient is placed. For example, if the patient was turned from right to back to left to back to right to back and left to back, then half the time the patient was on

her back. Once a wound has developed, if possible, the patient should be kept off the wound. Sometimes, this is difficult where the patient is having respiratory problems and must have the head of bed up, in which case a higher quality of specialty bed or more frequent pressure relief may be needed. The goal is to protect the wound from worsening.

Expert Testimony in Pressure Injury Cases to Prove Fault

States may differ in the requirements for, or limitations on, expert witnesses. Areas of expert testimony usually include a nurse expert on breach of the nursing standard of care, a nursing home administration expert on breach of administrative standards, and a physician on causation and future care issues.

A nursing home administration expert is helpful to speak to the underlying cause of the neglect, that is, understaffing. The plaintiff's attorney will want to focus the jury on administrative negligence as a cause of the nursing neglect because of inherent respect jurors have for nurses who work hard and are typically underpaid. Attempt to show the company's role in dictating the scheduling of nursing staff, to save money, and how that deprived both patient and staff of the ability to receive and provide good care. This is done by calculating the amount of time required to carry out the duties to meet the needs of the patients, and then demonstrating how difficult it would be for staff to meet those needs.

A nursing home administrator expert will address the planning for staffing needs and utilize the record of nursing hours-per-patient-day. Such records are subject to discovery. This record shows the patient census and the number of nursing and nurse aide staff on duty for each shift. This can be used to demonstrate understaffing. For example, suppose the facility has 100 patients and only 5 nurses or aides on duty, or 20 patients per nurse/aide. On an 8 hour shift, each nurse/aide has 480 minutes available to provide care for 20 patients. 480 divided by 20 patients allows 24 minutes of each shift per patient for the 8 hour shift. In depositions of staff, have them testify how long each task takes to perform during their shift, including such tasks as repositioning, toileting, feeding, dressing, transporting, dispensing medications, and other such tasks commonly done during a shift. Usually, the amount of time required for basic care far exceeds 24 minutes per shift for each patient. For example, just to perform a skin assessment, clean the patient, and reposition the patient every two hours – basic prevention measures – would likely take more than the entire 24 minutes per shift, leaving no time for anything else. And where two persons are required to reposition, two staff members are doubling up to do this. Of all the tasks to be performed during a shift, what is likely to be ignored? Changing a soiled patient? Documentation? Answering call lights? Transporting to the dining room or serving meals? Giving medications? When one factors in that a nurse must help another nurse in repositioning or operating a Hoyer lift, the problem is even worse. No wonder teaming up with another nurse to reposition a patient was deferred.

When a jury appreciates all the tasks and amount of time needed to perform them, it is easy to understand how it would be that repositioning fell short – due to understaffing. And this was the fault of the employer who wanted to save money on nursing payroll.

Meeting Common Defenses in Pressure Injury Cases

Depending on the facts of the case, there are two common defenses raised by the defense: (1) The patient’s comorbidities were such that the pressure injury was unavoidable and (2) the patient declined (“refused”) to be turned.

Regarding the first defense, there are certain conditions that may or may not impact the patient’s susceptibility to pressure injury. Paralysis makes it harder to keep the patient repositioned; poor nutrition makes a pressure injury hard to heal; and any impairment of blood quality or flow makes compression of capillaries more susceptible to ischemia and death of tissue.

In order to meet these defenses, the plaintiff’s lawyer should conduct a root cause analysis as to not only the nature of the injury, but the circumstances that caused it. The NPIAP, often cited by the defense, and CMS define whether the injury was avoidable or not.

Avoidable means that the resident developed a pressure ulcer and that the facility did not do one or more of the following: evaluate the resident’s clinical condition and pressure ulcer risk factors; define and implement interventions that are consistent with resident needs, resident goals, and recognized standards of practice; monitor and evaluate the impact of the interventions; or revised the interventions as appropriate.

*Unavoidable means that the resident developed a pressure ulcer even though the facility had evaluated the resident’s clinical condition and pressure ulcer risk factors; defined **and implemented interventions that are consistent with resident needs**, goals, and recognized standards of practice; monitored and evaluated the impact of the interventions; and revised the approaches as appropriate.*

Note the highlighted portion -- basically, an unavoidable pressure ulcer is one in which everything was done correctly and the patient still developed a pressure ulcer. The required interventions include turning and repositioning the patient, so if there is evidence of a lack of adequate offloading, by definition, the injury cannot be said to have been unavoidable. And if the defense makes the argument of unavoidability, in effect, they are arguing that “it was unavoidable because we didn’t comply with the standard of care.”

There are rare instances when a pressure injury may truly be unavoidable. If the patient is in a dying mode, not eating or drinking, is required to be in a supine position because of hemodynamic instability, has severe dysphagia with unavoidable aspiration,

stage IV metastatic cancer, kidney failure, and other such severe conditions, it may be possible to prevent pressure injury, but the patient's severe comorbidities require the care providers to attend to more lifesaving interventions and put skin breakdown at the bottom of the agenda. Such cases are not worthy of litigation. But they are rare.

Some critically ill patients require vasopressor medications to treat severely low blood pressure. The effect of such medications is to shunt blood flow to the vital organs, the theoretical effect of which is to reduce blood pressure to the periphery. Defense experts will base their opinion of unavailability on the use of such medications, reasoning that this reduced capillary flow to the skin. This notion is not supported by any empirical study, nor does it seem logical. If the patient were to have such impairment of blood flow, one would expect to find signs of same apart from the pressure injury -- cyanosis, lesions to the extremities, and so forth. The notion that blood flow to the backside or pelvic area, an area supplied by the aorta, would be impaired so much by vasopressors, as to cause skin breakdown, is simply unfounded. And if the patient is on vasopressors, then, theoretically, this should increase diligence in avoiding prolonged pressure.

The basic concept is this: the higher the level of comorbidities, the higher the level of diligence required to prevent pressure injuries.

Conclusion

Naturally, each case is different on the facts of neglect, the severity of the injury, and the degree of pain and suffering. Also, cases differ in value depending on the forum in which they are tried. As jury consultants have taught, verdicts are often driven by the "anger factor" – evidence of deliberate understaffing, conscious disregard and lousy patient care reflecting lack of adequate nursing care available. Evidence of notice to the owner and manager of ongoing problems in the facility should be presented to place the patient's injury event into context and help explain why the injury occurred.