Pressure Ulcer Development

Pressure ulcer stages

Stage 1: Non-blanchable erythema. Intact skin with non-blanchable redness of a localized area usually over a bony prominence.

Stage 2: Partial thickness. Partial thickness loss of dermis presenting as a shallow open ulcer with a red pink wound bed, without slough.

Stage III: Full thickness skin loss. Subcutaneous fat may be visible but bone, tendon or muscle are not exposed. Slough may be present but does not obscure the depth of tissue loss.

Stage IV: Full thickness tissue loss. Full thickness tissue loss with exposed bone, tendon or muscle. Slough or eschar may be present. Often includes undermining and tunneling.

Problem
• More than 2.5 million patients in the U.S. acute care facilities suffer from pressure ulcers.
• Patients who developed pressure ulcers while in hospitals: -remain in the hospital for an average of 6.4 days longer than those who did not acquire a pressure ulcer -more likely to be readmitted to the hospital within 30 days of being discharged.
• $11 billion annually spent to treat pressure ulcer.
• The average cost of pressure ulcer care per patient has been estimated at $43,180.

Case Study
George, had a low anterior resection for cancer of the bowel. He was transferred from a rural hospital to an ICU in a major metropolitan teaching hospital where he remained for approximately three months. 14 days after the admission: The patient is not being moved as nurses stated it made the patient “hemodynamically unstable”. This is a misnomer that must be overcome. This picture shows redness of the surrounding skin, which shows the effects of pressure. The wound itself is necrotic.

New approaches in preventing hospital acquired pressure ulcer

Continuous Bedside Pressure Mapping
- The thin, pressure-sensing mat that comfortably fit over a mattress and under any standard bed sheet. The mat contains thousands of sensors designed to measure levels of pressure between 0-180 mmHg.
- A monitor that displays digital imagery pinpointing areas of high and low pressure points (Behrendt et al., 2014).

The Turn Team
A team of 2 PCAs (the “turn team”) were tasked with turning and repositioning all hemodynamically stable patients every 2 hours, around the clock (Still et al., 2013).

Nursing Round
Two nurses conduct weekly peer-to-peer rounds that included discussions about key elements of our patients’ skin status including current Braden Scale for Pressure Sore Risk score, and implementation of specific interventions related to subscale risk assessment (Kelleher, Moorer, & Makic, 2012).