Traumatized by Road Rash

Authors:
Janet Nowland, MS, RN, CWOCN, janet.nowland@gmail.com and
Edwin C. Yeary II, M.D., F.A.C.S., edwin.yeary@sjmc.org, St. John Medical Center, Tulsa, OK
**CLINICAL PROBLEM**

Road rash / abraded skin occurs when moving skin collides with a non-moving object such as asphalt, grass or gravel. These wounds do not bleed much but are usually quite painful and are highly susceptible to infection due to wound contamination at the time of injury. Our Level II trauma center had no standard protocol for managing this type of wound. Infection prevention, pain management and efficient use of nursing time were our desired outcomes.

**DESCRIPTION OF PAST MANAGEMENT:**

Most treatment regimens in the past centered on painful daily cleansing and coverage with antibacterial topical agents such as silver sulfadiazine cream or triple antibiotic solution. Many of these abraded surfaces were in contact with bed surfaces or adjacent to other surgical wounds making typical treatment regimens difficult. In addition, the dressing changes were often neglected due to other pressing physiological concerns.

**CURRENT CLINICAL APPROACH:**

A team approach between the CWOCN and the trauma surgeons led to our current protocol. 15 patients have been in the study. Our goal is to treat 20 more. The abraded skin is cleaned in the operating room or bedside within 24 hours of admission using a plain soft brush and mild cleanser. Next, a silicone based antimicrobial foam dressing is applied with dressings changed every 3-5 days.

**CONCLUSION:**

There are many ways to treat abraded skin. At this time, our Level 2 trauma center has treated well over 50 patients with this type of injury. We have found cleaning the skin in the Operating Room to be absolutely the best way to remove debris. However, not all trauma patients require surgical procedures. If patient does not have a reason to be in the OR, their skin is cleaned at bedside using intravenous pain management for analgesia. At the end of our study, none of our patients’ abraded skin became infected and dressing changes could be done without any additional pain medication. Changing the dressings only 1-2 times a week instead of BID allowed our nurses to focus on more critical patient issues.

**PATIENT OUTCOMES:**

Before standardization, care was inconsistent leading to wound infections and painful dressing changes. Multiple supplies were used and dressing changes occupied valuable nursing time in the NTSCICU. After implementation, care was standardized, infections were prevented and pain was easily controlled during dressing changes.

**REFERENCES:**

Bryant, R., Nix, D. Acute and Chronic Wounds, Chapter 19, Principles of Wound Management. p. 391-426
Bryant, R., Nix, D. Acute and Chronic Wounds, Chapter 18, Massive Tissue Loss: Burns. p. 361-390

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