Cement-related injuries: review of a series, the National Burn Repository, and the prevailing literature.

(Lesiones relacionadas con el cemento: revisión de series, del repositorio nacional de quemaduras y de la literatura principal)

Abstract

The spectrum of cement-related injuries encompasses contact dermatitis, abrasions, ulcerations, chemical burns, and burns from explosions during the manufacturing process. The purpose of this study was to compile cement-related conditions seen in two burn units (1999-2005), literature case reports and series (1950-2006) and the (1989-2001) National Burn Repository (NBR). There were 3597 admissions in two Midwestern burn units, of which 12 cases (0.8%) were cement burns. They occurred in men, aged 15 to 64 years with a burn range of 0.25 to 10% TBSA, exposure time of 1 to 6 hours, treatment delay of 1 day to 2 weeks, hospitalization (2-14 days). Literature review of 109 cases indicated that cement-related injuries were predominantly seen in men, aged 26 to 45 years; with a cement-exposure time of 1.5 to 4 hours, treatment delay (1 day to 5 weeks), hospitalization (10-33 days), and healing time (2-7 weeks). There were 52,219 burn admissions in the NBR, of which 44 (0.08%) were cement-related burns; 95% were men with a mean age of 41 years, 6% TBSA cement burn and an 8-day hospital stay. The demographic characteristics of the burn units and NBR cases were similar to those in the literature. This preventable injury occurred primarily in the working age male patient and was associated with long healing times. Public awareness and enhanced manufacturer package warnings and education may decrease future cement-related injuries.

Enlace