

Guest editorial

Burns care and management

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It is a wonderful opportunity to devote this edition of *CME* to burn care and management. It is also an honour and privilege to be invited as guest editor. Burns are a frequent injury in South Africa, still claiming too many lives with unnecessary deaths and leaving patients with lifelong disability. Every opportunity to promote better care and to assist the health care worker with sound knowledge should be used.

In Africa there is not enough evidence to support a decline in burn-related injury or deaths. Prevention efforts will probably decrease the number of patients with potentially fatal burns. But improved critical care is one of the main reasons why more of those patients who still sustain severe burns will survive. In this issue an overview of burn critical care is given with comparison between First-World and South African care, ICU management in general and burn care in particular, and the difference in outcome between ICU and ward patients. Financial planning and expense is an interest with research, and the author emphasises a cost-effective practice.

Steenkamp and Albertyn have both been attached over a very long period to burn units in the Western Cape. Both authors have vast experience in psycho-social care of the burn patient. Burn survivors are faced with extraordinary challenges. Adult patients may present with clinical syndromes such as delirium, post-traumatic stress disorder, suicidal thoughts, depression and adjustment disorders. In children burn injuries can lead to a delay in developmental milestones, sleep disturbances, regression, delayed educational development, depression and anxiety. The discussion refers to social support at different levels and stages of treatment, pain management in the burn unit and the neglect and importance of a successful protocol, the location of the burn injury and premorbid personality and social functioning. Intervention guidelines are given and many patients can even do better and show improvement in social functioning following a burn injury.

Changes made during the 1970s with nutrition in burn patients paved the way to an overall improved regimen in general surgical patients as well. A burn injury is the most severe type of injury from a metabolic point of view. Prins describes the effect of the metabolic response on energy and nutrients. The requirements of burn patients are discussed with practical formulae and tables. With her huge experience she also discusses the implementation of a nutrition care plan, assessment and areas of pitfalls with complications.

Electrical burns are the most devastating of all thermal injuries on a size-for-size basis, usually involving both the skin and deeper tissues. Once again in South Africa, as in developing countries, we have a unique situation where mortality and morbidity are very high in patients who attempt to steal copper wires from high-tension lines transporting electricity. The Polokwane/Mankweng Hospital Complex describes their experience and Mzezewa gives the intriguing pathophysiology. Management of this injury again emphasises the importance of prevention. Further management includes acute care, hospitalisation and possible surgical strategies.

Infection remains a common cause of death in burn patients and is responsible for 75% of all deaths in patients with burns exceeding 40% of the total body surface area. Factors that are of importance include the type of organisms, their numbers and virulence, host resistance and the quality of the wound, as well as the presence of devitalised tissue. The indiscriminate use of antiseptics and antibiotics is largely responsible for increasing prevalence of resistant and opportunistic infections such as MRSA, *Acinetobacter*, multi-resistant *Klebsiella* and *Pseudomonas* (associated with a mortality rate of up to 80%). Prophylactic systemic antibiotics cannot prevent burn wound infection, should be used with caution, and cannot be proven to improve outcome. Rode discusses diagnosing burn wound infection and treatment using antimicrobial therapy.

A very useful way of minimising bleeding during burn surgery called the tumescent technique is described by Engelbrecht. In a short article on HIV and burns, Muganza touches on the very important problem of patients with compromised immune function and highlights the lack of consensus guidelines when practitioners are faced with treating a burn patient who is HIV positive. Pillay gives very important information about scar management during rehabilitation of burn patients – an occupational therapist's perspective.

As a result of dedication over more than 20 years, not only by individuals in South Africa but also through the South African Burn Society, the flame of education in burn care has never been extinguished. After years of hard work two recent events moved forward with excellent results. The first was the establishment of the Pan African Burn Society with address www.pabs.co.za. The second was the implementation of the Emergency Management of Severe Burns EMSB 1-day course in Cape Town and Johannesburg. For details about the course, contact bbates@ich.uct.ac.za.