Continued enteral tube feeding in burn patients requiring surgery
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Introduction: The systemic effects of serious burn injury include significant loss of plasma protein, tissue injury and hypermetabolism. Critical patients often require multiple surgical procedures for primary burn excision and grafting. Patient enteral tube feeding is often held for long periods in the peri-operative period. Critical burn patients can easily fall behind in their nutritional requirements, and repeated and prolonged holding of nutrition pre and post operatively is a contributing cause.

Methods: A retrospective assessment of all patients admitted between 2013 and 2017 to identify critical patients receiving enteral tube feeds that were held for operative procedures. The age, sex, total burn size and the number of times the tube feedings were held and for how long in the peri-operative period. Pre-albumin levels were used as a marker of the patients current nutritional status in the peri-operative period. The study groups were split into patients who survived their burn injury and those who died.

Results: The study identified 41 critical patients who met the criteria from a data base of over 1000 patients. Twenty patients died and in this group; the mean size of the burn were 40% total body surface area, age of 57 years and pre-albumin of 7. The group that survived had a mean burn size of 36% total body surface area, age of 44 and pre-albumin of 19.

Conclusions: Nutrition is a vital component in the recovery of serious burn injury and pre-albumin can be used as a surrogate marker of a current nutritional status. Patients who died from their burn injury had pre-albumin levels that were significantly lower than those who survived. Geriatric patients >65 years old had lower pre-albumin levels than those under 65 for similar size burns. There are significant numbers of studies that attribute appropriate nutrition with improved outcomes and decreased mortality in burn patients. It is our assertion that by continuing enteral tube feeding in a selected group of patients will help to maintain the significant nutritional requirements of critical burn patients.

Applicability of Research to Practice: Continued enteral tube feeding can aid in survival of critical burn patients.

Experience of Application of a Computer Based Registry of Infections in the Linköping Burn Centre
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Introduction: Infections are one of the leading causes of morbidity and mortality among patients with burns. In our hospital we have different patient data registries which are concerned with different aspects of patient care but there was no specific registry focusing on the microbiological profile and antibiotic therapy for burn patients. In order to overcome this problem we added a new module in our local burn patient database aiming to monitor changes in the bacteriological pattern and the development of multi-resistant bacteria during the care process, identify preventable infections, and to get an overview of the antibiotic treatment given to avoid using last choice drug whenever possible. We aim to describe the results of an infection registry for burn intensive care patients during 2 years in the national Burn Centre in Linköping, Sweden.

Methods: All patients who required burn intensive care during 2015–2016 were prospectively recorded in the local burn patient database aiming to monitor changes in the bacteriological pattern and development of multi-resistant bacteria during the care process. The most common antibiotic therapy was Piperacillin/Tazobactam, followed by Cefotaxime. Combined therapy was more common than monotherapy. The most common micro-organism was Staph. Aureus. Infection with Pseudomonas aeruginosa was common in the first year but not during the second. Five patients have developed multi-resistant infections with pseudomonas bacteria during the care process. The most common antibiotic therapy was Piperacillin/Tazobactam, followed by Cefotaxime. Combined therapy was more common than monotherapy.

Conclusions: Computer based registry has proven to be a useful tool for surveillance of infection in the burn care setting and we will start recording all patients admitted for burns in the coming years.

Applicability of Research to Practice: The computer based registry is used in daily clinical practice. It serves as the monitoring tool for infection control, and it will provide data for future studies in which we will evaluate changes in treatment.