Early Feeding Tube Placement in Burn Patients and the Impact on Nutritional Outcomes

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Objective:
Upon completion of the lecture, attendees should be better prepared to:
▪ Recognize the importance of early initiation of tube feeds in large TBSA burns
▪ Discuss increased monitoring of nutritional measures to improve patient outcomes

Introduction: Initiation of early nutrition therapy and providing adequate caloric needs in burn patients has been shown to maintain gut integrity, reduce nosocomial infections, decrease disease severity, and achieve nitrogen balance earlier. Failure to meet nutrition needs impairs wound healing, increases risk for infection, and leads to cellular dysfunction. Our Performance Improvement Program monitors several metrics relating to nutrition. These include the time from admission to the placement of feeding tubes, the time it takes to achieve goal tube feeding rates, and the percentage of daily caloric needs met on all patients that meet the criteria for a feeding tube.

Methods: We reviewed performance improvement data from January 2016 to December 2017. All patients on a ventilator and admitted during this period were included with the exception of patients extubated within 24 hours of admission to the burn unit. Our feeding tube placement protocol calls for post-pyloric placement of feeding tubes with the rationale of a decreased risk for aspiration and the ability to continue tube feeds in the operating room thus decreasing the incidence of not meeting daily caloric needs. If nursing was unable to advance the feeding tube, the GI service was consulted to complete the procedure.

Results: During the review period, we had 596 admissions with 50 feeding tube placements. The mean time from admission to tube placement was 5.5 hours. The mean time from admission to initiation of feeding was 11 hours. The mean time from admission to goal rate achieved was 19.5 hours. The percentage of successful post-pyloric placement of feeding tubes by nursing was 75.5%. The average daily caloric needs met was 100.5%.

Conclusion: With early small bowel feeding tube placement, we are able to meet caloric needs quickly and consistently to prevent graft loss, reduce infections, decrease LOS, and contribute to positive patient outcomes. We attribute our success in these nutritional matrices to our vigilant Performance Improvement process. In which all of these matrices are monitored and obstructions to nutrition goals are identified in real-time and resolved.
Disclosure:

Ali Clore – No Relevant Financial Relationships to Disclose
Rajiv Sood – Speakers Bureau: Avita