Feasibility of Implementing a Reduced Fasting Protocol for Critically Ill Trauma Patients Undergoing Operative and Nonoperative Procedures
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Summary
The study was a prospective, observational cohort study to determine the feasibility of a new reduced fasting protocol for implementation prior to critically ill, mechanically ventilated trauma patients undergoing selected operative and nonoperative procedures. The study was conducted during 6 consecutive months (February 1 through July 31, 2005) in two 3-month phases. The first 3 month phase, pre-implementation phase, consisted of using the previous protocol of a minimum 8-hour fast prior to operative procedures. During the next 3 month period, a post implementation period, a new reduced-fasting protocol was introduced, the protocol patients received small bowel feeding of enteral nutrition up to the time of the procedure, or gastric enteral feedings were discontinued 45 minutes prior to procedures.

Major results reported by the authors
During the 6 month study, there were 65 patients in the pre-implementation group (the standard group) and 75 patients in the intervention group, for a total of 140 patients. Of the 140 total participants, 94 underwent surgical procedures; 41 in the standard group and 53 in the intervention group. 19 of the patients in the intervention group were inadvertently made NPO prior to the procedure and therefore did not follow protocol so these results were not included in the study. Patients in the intervention group showed greater enteral nutrition delivered and faster attainment of target goals, however the results were not statistically significant. Rates of infection complications were similar between both groups, however the number of hypoglycemic events was higher in the intervention group.

Authors Conclusions
The main findings of this study are that a reduced fasting protocol shows trends toward improvement of the delivery of nutrition in critically ill patients without increasing infectious complications or risk of aspiration. The authors concluded that the practice appears to be safe, given the fact that no overt episodes of regurgitation or aspiration (the two most feared complications) occurred during the study.

Evaluations
Since the study was not large enough for the results to be statically significant, The study excluded patients undergoing intrathoracic, abdominal, and neurological procedures involving craniotomy or procedures that required prone positioning. These procedures were excluded because of the perceived risk of aspiration during such procedures. Included procedures were: Orthopedic limited to extremity surgery and not requiring
prone positioning, otolaryngeal trauma, ophthalmologic surgery, tracheostomy, percutaneous feeding tube placement, and nonoperative procedures such as bronchoscopy and inferior venacaval filter placement.

**Take Home Message**
The study shows that patients with protected airways can undergo selected procedures without the mandatory 8-hour preoperative fast without an increased risk of infection complications and improved delivery of enteral nutrition. However, since the study was too small for the results to be statically significant a similar study would be necessary to validate the results prior to being implemented at a trauma center.

**For Discussion**
Operations only targeted a small group of patients undergoing select operative and nonoperative procedures, would the results have been different if patients undergoing abdominal surgeries were included in the study?