The use of bedside electromagnetically guided nasointestinal tube for jejunal feeding of critical ill surgical patients.

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Background: Gastral nutrition in critically ill surgical patients can be difficult because of gastric paresis and a large number of patients fail to reach required caloric intake. Endoscopic or radiologic placement of nasointestinal tube is frequently performed with delay and may raise the risks for critical ill patients.

Objective: Bedside placement of electromagnetically guided nasointestinal tube (EGNT) may reduce the risk of x-ray exposure, “time out of ward” and caloric deficit.

Methods: All patients in a surgical intensive care unit with need of post-pyloric feeding tube placement were identified. Data were collected from CORTRAK®-EGNT-System and x-ray. An analysis of placement success rate, time for tube positioning and delay of enteral feeding when EGNT failed were performed.

Results: 70 tubes were placed in 51 patients. After the first trial 79% were placed post-pyloric and 21% gastral. Successful postpyloric placement increased to 90% after the second trial. Placement failure occurred in 10% of all cases. In 3 patients jejunal placement was successful in modified anatomical situs after upper gastrointestinal surgery. After 20 min unsuccessful postpyloric placement, performance was stopped and declared as failure. X-ray findings correlated in 100% with CORTRAK® data. Time needed for placement varied from 1-20 min (mean 7.6 min).

Conclusions: Bedside positioning of electromagnetically guided nasointestinal tube is safe and effective in critically ill surgical patients. Most placements succeed, even in patients after upper GI surgery. EGNT positioning is time saving and may enhance the caloric intake.