IMPACT OF A STANDARDIZED POST-OPERATIVE FEEDING REGIMEN AFTER A LAPAROSCOPIC PYLOROMYOTOMY UTILIZING A CPOE ORDER SET

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INTRODUCTION:

• Previous studies have shown that utilization of computerized provider order entry (CPOE) improves patient safety. However, few studies have shown its effect on patient outcomes. In January 2010, the pediatric surgery service initiated a standardized feeding regimen (SFR) for post-operative pyloromyotomy patients utilizing CPOE. This study is to examine its effect on patient outcomes and standardization of care.

OBJECTIVES:

1. Examine how implementation of a CPOE-driven SFR may impact length of post-surgical hospital stay after laparoscopic pyloromyotomy
2. Assess if utilization of a SFR-driven CPOE order set affects adverse event rates and/or re-admission rates after a laparoscopic pyloromyotomy
3. Measure the level of physician and nursing compliance to a SFR when a CPOE order set is offered as a tool

METHODS:

• Retrospective chart review of patients admitted with a diagnosis of pyloric stenosis from July 21, 2007 to October 21, 2009 and from April 21, 2010 to July 21, 2012 treated at Le Bonheur Children’s Hospital
• Preoperative, operative and postoperative data including demographics, surgical techniques, key times, and outcomes was collected.
• IRB approved study

RESULTS:

• 344 patients were included, 142 prior to initiation of CPOE and 202 after full implementation.
• Median time (hours) to discharge after pyloromyotomy prior to SFR with CPOE was 24.2 (Q1:20, Q3:40), after was 23.3 (Q1:20.3, Q3:27.3), \( p=0.79 \), which was not significant.
• Median number of emesis before SFR with CPOE was 0.0, after SFR was 1.0 \( p=0.005 \).
• There was no significant difference in 30 day readmit or complication rates between the two groups.
• Compliance to utilization of SFR using CPOE was 100%.

CONCLUSIONS:

Design and utilization of user friendly CPOE order sets within an institution for the implementation of a standardized feeding regimen for postoperative pyloromyotomy patient can produce consistency of care without increasing complication rates.

REFERENCES:


