A DYNAMIC DISCHARGE PROTOCOL PROVIDES EFFICIENT CARE FOR UNCOMPLICATED APPENDICITIS

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Purpose:
Postoperative management of uncomplicated appendicitis is highly variable and often includes an overnight stay in the hospital. We implemented a dynamic criteria-based discharge protocol designed to facilitate timely discharge for patients with uncomplicated appendicitis. We evaluated the effect of our protocol on length of stay (LOS), and total cost of care.

Methods:
After obtaining IRB approval, we implemented a dynamic criteria-based bedside nurse evaluation discharge protocol at our tertiary care children’s hospital. Postoperatively, the bedside nurse evaluated patient’s oral intake, pain control with oral medications and parent comfort with discharge. When all discharge criteria were met, the bedside nurse contacted the surgical team for discharge orders. We collected data on all patients with uncomplicated appendicitis at our institution following protocol implementation (May 1, 2012 to May 1, 2013) and compared them to a control group.

Results:
561 patients were treated for uncomplicated appendicitis (273 pre-, 288 post protocol). Following implementation of our protocol the percentage of patients with uncomplicated appendicitis discharged between the hours of 6:00 pm and 12:00 am increased from 11% to 27% (p < 0.001) and there was an overall reduction in LOS (including pre- and postoperative time) from 38 (95% CI 35-40) to 24 (95% CI 22-27) hours (p < 0.001). Total cost of care per patient also decreased from $5622 (95% CI $5416-$5836) pre-protocol to $4563 (95% CI $4399-$4732) following implementation (p < 0.001). There was no change in hospital readmission rate (3.1% pre-, 2.0% post protocol) or postoperative abscess rate (1.3% pre-, 0.9% post protocol).

Conclusion:
Criteria-based bedside nurse evaluation led to decreased LOS and total cost of care in patients with uncomplicated appendicitis. Reducing variability in postoperative care did not adversely affect clinical outcomes.

NOTES: