Same-day discharge after laparoscopic gastrostomy placement: A preoperative plan for success

Disclosure Information

• No disclosures

Objectives

• The audience will be able to describe the appropriate patient candidates for same-day discharge after a laparoscopic gastrostomy
• The audience will be able to name 3 or more modifications to the pre- and post-operative practices of patient care and nursing practice that aid in the ability for same-day discharge
• The audience will be able to describe contraindications to sending a patient home as a same-day discharge after a laparoscopic gastrostomy.
How it’s done-more patient rights

- Right patient
  - Identification of the potentially successful candidates
- Right modifications to current methods
  - Order of operations
  - Right minds
    - Buy in from care team

Why have we been doing what we’ve been doing?

- History of delaying feedings... evidence???
  - Feeds are traditionally started 24 hours after gastrostomy placement
  - Concern for high gastric residuals that may lead to aspiration and to decrease the risk of peritonitis
  - This practice is not supported by high level evidence

Why have we been doing what we’ve been doing?

- Variation in the timing of initiation of feeds, the method of initial feeds, and the choice of initial feeds (Pedialyte vs. formula or BM)

- Provider preference of these orders dictate hospital LOS
Considerations

- Education
- Pain relief
- Cost
- Convenience for families
- Exposure during inpatient hospital stay vs. "short stay"

Retrospective review

- Retrospective review of patients who underwent lap GT was performed from May 2010 to May 2015
- All were outpatients who were on prior nasogastric feeds
- The postoperative order set initiates feeds in 4 h to advance to goal as tolerated
- Time to initial feed and goal nutrition, and overall length of stay (LOS) were evaluated

Retrospective review

- 122 patients were identified with 55% percent being male and with a median operative age of 15 months
- 53% were started on bolus feeds
- Initial feeds were started at a median of 2.8 hrs
- The median duration to goal nutrition was 6 hrs
- 97% reached full feeds within 24 h with no complications related to feed advancement
- Median LOS was 26 h
**Considerations**

- We did it with non-perf’d appys and chole’s, why not try GT’s
- Protocols have shown to benefit care, reduce LOS and resource utilitzation

**Who**

- Healthy NG fed FTT kids
  - Parent experience with enteral feeds
  - Exclude medically complex, those not done laparoscopically or done with other procedures (fundo), special diet requiring monitoring, postop ICU needs, cardiac anesthesia, vent dependence

**How**

- BUY IN
  - All members of care team willing to give it a try
  - Be flexible
How

• Trial of FAST (feeding and simultaneous transition) to discharge clinic
  • Multidisciplinary clinic
    • care management
    • nutrition
    • surgery APRN
    • nursing support
    • OR scheduler
  • Scheduled by nursing via intake template

Template intake

• Goal:
  • To provide parents with education and nutrition plans prior to g-tube eval and in coordination of their OR date within 2 weeks with the goal of efficient post-op discharge from the hospital

Template intake

• Legal Guardian available to sign consent day of appt
• Best Contact number
• PCP/Specialist referring for GT placement
• Past Medical History
• Diagnosis
• Medications
• Radiology studies completed
Template intake

- Other significant medical problems? (Cardiac, Respiratory, Neurological, etc.)
- Any prior surgeries? Fundoplication? If yes, schedule f/u with same surgeon
- Significant GERD/emesis?
- Already established g-tube with issues/problems?

Template intake

- Who follows child's nutritional needs (Nutrition, SCC, GI, or Neuro-Keto)?
- Chart review of most recent Nutrition note: Date: Author:
- Current NG feeds?
- Pump at home?
- Established DME?

Template intake

- Parent's goal OR date
- Call to schedule new or f/u appt for post op g-tube feeding plan within 2wks prior to potential OR date.
- If parent unsure of desired OR date or wants to wait, hold off on coordinating with Nutrition.
**Template intake**

- Parent Education:
  - Your child will typically be seen by an APRN regardless of which surgeon's clinic you have been scheduled in. Determination for surgery will be made at that time and patient scheduled with next available surgeon unless otherwise specified. The surgeon is available should the need arise. Please specify if you would like a specific surgeon prior to scheduling your appt.

**Clinic flow**

- Provider
  - H&P
  - Education/portal sign-up
    - Picture worthy a thousand words
    - Avoid ED, unnecessary clinic follow-up outside of regularly scheduled visit

- Informed consent
- Peritonitis/dislodged Gtube
- Persistent pain
- Picture and video education
- Granulation tissue
- Drainage
- Administration of feedings
- Once nutrition recs are available, enter GT short stay order set as FUTURE INITIATE
Clinic flow

- Care Management
  - Assess/arrange DME needs

- Nutrition
  - eval and feeding plan

- Clinic staff
  - Schedule future 8 week postop clinic visit and 2 week f/u visit with referring provider

- Surgery Scheduler
  - Patient scheduled within 2 weeks of clinic visit
    - Schedule with surgeon rotating in alphabetical order
    - If surgeon not available within 2 week, move to next one
    - Keep spreadsheet of those scheduled and with whom; to be shared quarterly
    - Schedule as 1st or 2nd case of the day as an Extended Stay
**Procedure**

- Patient to OR on scheduled day
  - Order set will be already in system
    - Resident/fellow to do discharge medication reconciliation, including prescription for home pain meds
    - Remainder of orders initiated by resident/fellow who did the case, or by short-stay RN who will be taking pt

**Postop**

- When short stay nurse receives patient from PACU, nurse will activate orders if they haven't already been done
- Formula room will make and deliver formula (usually takes approx. 1 hr)
- RN will start feeds via GT when formula arrives
  - Teach/allow family to do cares whenever possible
  - Education hand-outs
- Pt d/c'd when meets d/c criteria
  - Tolerating feeds
  - Pain controlled
  - Caregivers comfortable

**How it went**

- Successful same day-discharge!!
- BUT too long of a clinic visit
- Multiple providers in one visit takes too much time
- Info overload for parents
Revisions

• Simplify with separate preop visits back into regular gen surg clinics
  • Convert time slot increased to 30 minutes to optimize teaching
  • Can run 30-60 minutes

• Nutrition + PAT within 2 weeks (insurance requirement)

• Possible next-day OR
  • Postop course unchanged

• Care management does "homework" preop
  • Emails team to prep for needs
  • Presents DME opportunities after OR
  • "Options for home health visits postop**"

• Needs survey to assess the impact of change

Change acclimation

• Short stay unit
  • Traditionally GT kids cared for on postop floor

• Short stay RN's learn/refine skill set
  • Education sessions
  • Involve unit educator
  • Growing past-frequent emails, eventually outgrew the concern with experience
  • Order set for familiarity of postop orders/patient requirements

How are we doing?

- OR time
  • Range: 13-87 minutes
  • Mean: 26.77 minutes
  • SD: 15.11 minutes
How are we doing?

- Previously NG fed
  - Yes 85%
  - No 31%

Patient characteristics and outcomes

- Postoperative admission?
  - Yes 16.9%
  - No 83.1%
**How are we doing?**

- **Did the patient present to the ER within the first 30 days?**
  - Yes 25.4%
  - No 74.6%

**Financial Impact**

- **Outpatient visit/Same day d/c**
  - Clinic outpatient visit charge: $155-$229
  - Outpatient nutrition visit: $37.00-$15.00
  - Lap gatroscopy procedure – professional fee: $1460.00
  - OR level 3-60 min: $14,400.00
  - 50 min anesthesia gas: $850.00
  - PACU 60 min total time: $1,170.00
  - Extended stay room charge: $255.00 per hour

- **Inpatient overnight stay**
  - Clinic outpatient visit charge: $155-$229
  - Inpatient nutrition consult: $0
  - Lap gastroscopy procedure – professional fee: $1460.00
  - OR level 3-60 min: $14,400.00
  - 50 min anesthesia gas: $850.00
  - PACU 60 min total time: $1,170.00
  - Inpatient room charge: $6052.00 per day

**Difference:** $5,770
References


