Clinical Pathways

Tonsillectomy and Adenoidectomy
Perioperative Care

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What is a Clinical Pathway?

An evidence-based guideline that decreases unnecessary variation and helps promote safe, effective, and consistent patient care.
Objectives of Pathway

• To standardize the management of Tonsillectomy and Adenoidectomy patients based upon severity of their obstructive symptoms

• To prevent the use of unnecessary medications:
  o No perioperative antibiotics
  o 1 single dose of IV steroids in the operating room
Why is Pathway Necessary?

- Tonsillectomy and Adenoidectomy is a common procedure with greater than 500,000 performed annually in the United States.

- Standardization of care helps to:
  - Level-set expectations for patients, families and providers
  - Decrease unnecessary use of medications
  - Expedite patient flow
  - Consistent messaging and patient education
This is the Tonsillectomy and Adenoidectomy Clinical Pathway.

We will be reviewing each component in the following slides.
Determining Post-Operative Level of Care:

Outpatient vs. Med-Surg unit observation vs. PICU observation

Decision is made based on several factors
- Age
- Apnea-Hypopnea index
- Comorbid conditions
- Where family lives

Consider treating as outpatient:
- Age ≥ 4 years
- Apnea-Hypopnea Index < 5
- No other comorbid conditions (e.g. moderate to severe asthma, diabetes, Down Syndrome, craniofacial anomalies, morbid obesity, etc)
- Family does not live long distance from hospital
- No additional clinical concerns

Consider Med-Surg for one of the following:
- Age < 4 years
- Apnea-Hypopnea Index ≥ 10
- Comorbid conditions (see outpatient criteria)
- Lives long distance from hospital
- Other clinical concerns

Consider PICU for one of the following:
- Apnea-Hypopnea Index > 20
- Severe overnight desaturations (<80%)
- Severe hypercarbia
- End organ changes from OSA

- No preoperative antibiotics
- Prednisone 0.5 mg/kg x 1
  (max dose 12 mg)

Post-Operative Care
- No preoperative antibiotics
- Prednisone 0.5 mg/kg x 1 (max dose 12 mg)

Discharge Criteria:
- No supplemental oxygen requirement, and none overnight
- No desaturations < 90% while on OA
- No signs of active bleeding
- Temperature < 102ºC
- Tolerating adequate PO liquids (2-3 ml/kg/hr)
- Pain well controlled with oral medications as ordered

Discharge Medications and Instructions:
- Atenoclon 10 mg PO q4h (max: 1000 mg/day) offset q24hs with buPROP
- Buprenorphine 10 mg PO q4h (max: 400 mg/day)
- If pain is severe, may substitute for Atenoclon:
  - Hydrocodone/Acetaminophen [125 mg]
  - 5.0 mg Hydrocodone/g slow PO q6hr PPN
    (max: 5-10 mg Hydrocodone/g dose, max: Acetaminophen 4000 mg/day)

- [If BP < 90 w/ 20 mmHg, LS, OK, maintenance of IV fluids, good PO, then OK]
- [If severe, increment to post-laryngectomy soft diet]

Contacts: Christopher Griffin, MD

Post-laryngectomy: www.chirstophergriffinmd.com
Perioperative Care:
Regardless of Post-operative disposition
• There is no indication for perioperative antibiotics
• Single dose of intraoperative dexamethasone is given to all patients

Operative Care:
• No perioperative antibiotics
• Dexamethasone 0.5 mg/kg (max dose 12 mg)
Post Operative Care for Observation Patients:

Focus is on:
- Oral hydration:
  - IVF are weaned quickly once patient is tolerating liquids well.
- Pain management:
  - Goal is to avoid narcotics when possible
- Again there is no indication for antibiotics postoperatively

Level of monitoring is based on observation location
Discharge criteria:

There are pre-established discharge criteria, instructions, and management help to maximize efficiencies in patient flow.

Discharge Criteria:

- No supplemental oxygen requirement, and none overnight
- No desaturations < 90% while on RA
- No signs of active bleeding
- Temperature < 39° C
- Tolerating adequate PO liquids (≥ 10 ml/kg/shift)
- Pain well controlled with oral medications as ordered

Discharge Medications and Instructions:

- Acetaminophen 15 mg/kg PO q6hr (max 1000 mg/dose) offset q3hrs with Ibuprofen
- Ibuprofen 10 mg/kg PO q6hr (max 600 mg/dose)
- If pain is severe, may substitute for Acetaminophen:
  - Hydrocodone/Acetaminophen (325 mg) 0.1 mg Hydrocodone/kg/dose PO q6hr PRN (max 5-10 mg Hydrocodone/dose; max Acetaminophen 4000 mg/day)
  - *Dispense only 3 days worth.*
- Light activity and no school x 1 week; No gym, sports or recess x 2 weeks
- Soft diet x 2 weeks; Encourage frequent fluid intake
Use of Order Set

Order Set:
Has specific pre checked items that include diet and oxygen therapy
Quality Metrics

- Percentage of patients with NO intra-op antibiotic use
- Percentage of patients receiving single dose steroid intra-operatively
- Length of stay
- Percentage of patients with return ED visits (up to 14 days post-operatively) for pain, hemorrhage, or dehydration
- Number of admissions/observations for post-operative bleeds
- Number of patients returning to the OR for bleeds
Pathway Contacts

• Christopher Grindle, MD
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References


Thank You!

About Connecticut Children’s Clinical Pathways Program

Clinical pathways guide the management of patients to optimize consistent use of evidence-based practice. Clinical pathways have been shown to improve guideline adherence and quality outcomes, while decreasing length of stay and cost. Here at Connecticut Children’s, our Clinical Pathways Program aims to deliver evidence-based, high value care to the greatest number of children in a diversity of patient settings. These pathways serve as a guide for providers and do not replace clinical judgment.

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