

Clinical Question

When is the best time to repair an inguinal hernia in the premature infant?

Method

- There is lack of standardization of the timing of repair of pediatric inguinal hernias
- Given this lack of standardization, there is also confusion about the optimal timing of pediatric surgical consultation
- We developed an algorithm for consultation for surgical repair of pediatric inguinal hernias
 - This was implemented in algorithm as seen below
 - There was a consultation checklist that was provided as well
 - A proposal was then formed and data was collected

Proposal

- Inguinal hernia repair to be done prior to discharge unless incarcerated**
 - Preferably >2Kg
 - Preferably >3 m/o
 - Preferably off of ventilator or respiratory support
 - Preferably tolerating full feeds

Consultation Checklist

- Do the patient’s guardians consent to hernia repair?
- Is the child > 2kg or 3 m/o?
- Is or has the hernia been incarcerated?
- What other medical comorbidities might influence an operation (congenital heart disease, chronic lung disease, indwelling VP shunt or pacemaker, etc)?
- Will you need cardiac anesthesia?
- Has the patient reached full/ home feeds? If not, why?
- Has the patient reached home respiratory status?
- Any plans for upcoming surgeries (i.e G-tube, fundoplication, tracheostomy)?
- When is estimated discharge date?

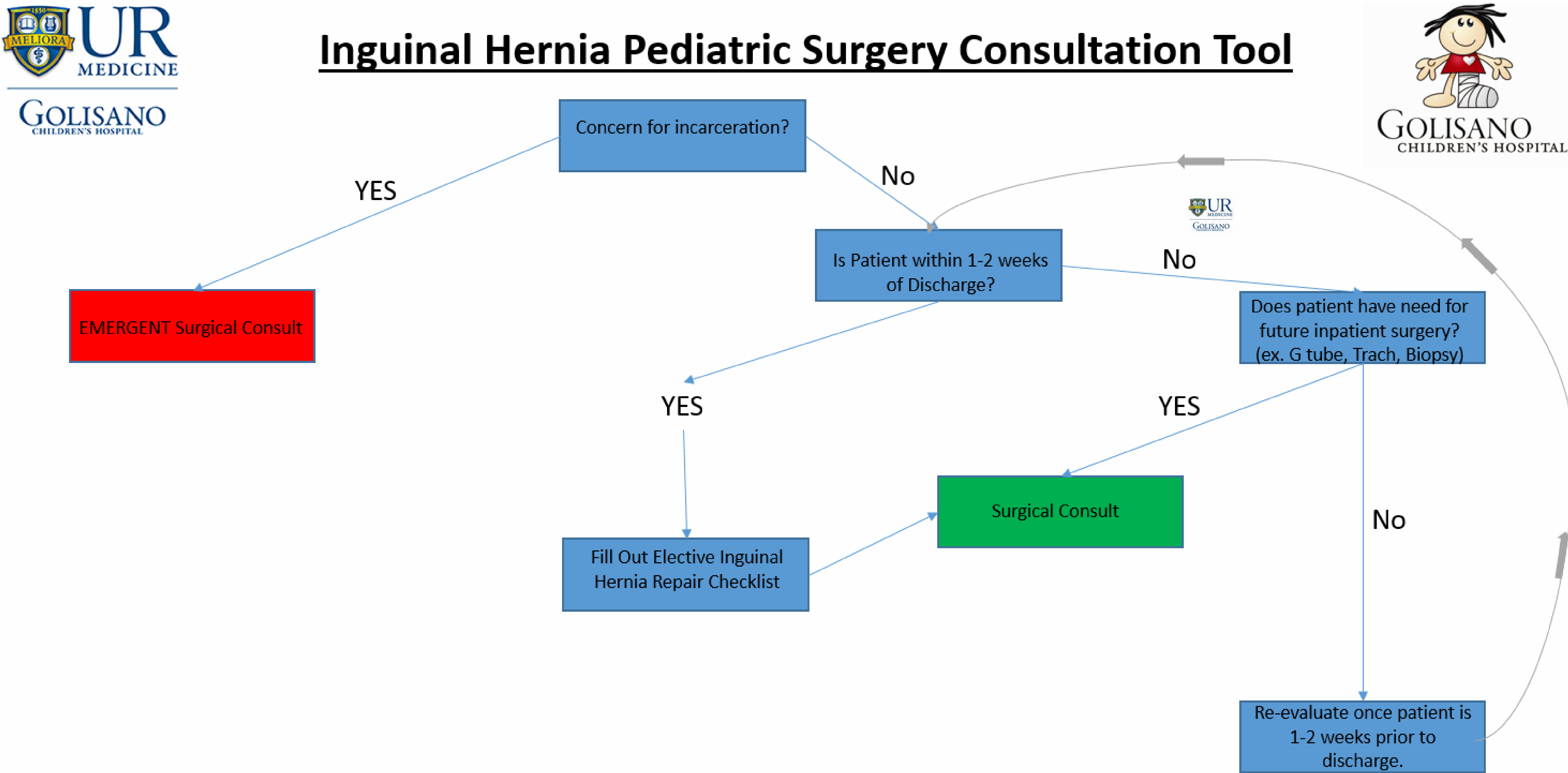
Results

Timing of Surgery	Feb 2018-Feb 2019
Early (before discharge)	2
At Discharge	6
Post Discharge	5
Total:	13 of 18 total consults

RESOURCES

- Antonoff, Mara B., et al. "American Academy of Pediatrics Section on Surgery Hernia Survey Revisited." *Journal of Pediatric Surgery*, vol. 40, no. 6, 2005, pp. 1009–1014, doi:10.1016/j.jpedsurg.2005.03.018.
- Casaccia, Germana, et al. "Timing and Management of Inguinal Hernia in the Premature Baby." *European Journal of Pediatric Surgery*, vol. 27, no. 06, 2017, pp. 472–477, doi:10.1055/s-0037-1608802.
- Crankson, Stanleyjohn, et al. "Management of Inguinal Hernia in Premature Infants: 10-Year Experience." *Journal of Indian Association of Pediatric Surgeons*, vol. 20, no. 1, 2015, p. 21, doi:10.4103/0971-9261.145440.
- Gulack, Brian C, et al. "A Multi-Institution Analysis of Predictors of Timing of Inguinal Hernia Repair among Premature Infants." *Journal of Pediatric Surgery*, vol. 53, no. 4, 2018, pp. 784–788, doi:10.1016/j.jpedsurg.2017.09.009.
- Khan, Faraz A., et al. "Inguinal Hernias in Premature Neonates: Exploring Optimal Timing for Repair." *Pediatric Surgery International*, vol. 34, no. 11, 2018, pp. 1157–1161, doi:10.1007/s00383-018-4356-8.
- Lautz, Timothy B., et al. "Does Timing Matter? A National Perspective on the Risk of Incarceration in Premature Neonates with Inguinal Hernia." *The Journal of Pediatrics*, vol. 158, no. 4, 2011, pp. 573–577, doi:10.1016/j.jpeds.2010.09.047.

Inguinal Hernia Pediatric Surgery Consultation Tool



Elective Inguinal Hernia Pediatric Surgery Checklist

- Do the patient’s guardians consent to Hernia Repair?
- Will this repair be done inpatient, coordinated with other surgical procedures?
 - If so, what procedures?
 - For male patients, does this family also wish to have a Circumcision?
- Is there a family preference for inpatient vs. outpatient repair?
- Are the social circumstances that favor inpatient repair? (ie. concern for Lost to follow up, far distance to hospital if incarceration occurs)
- Is there a medical preference for inpatient vs. outpatient repair?
- What other medical comorbidities might influence an operation (congenital heart disease, chronic lung disease, etc)?