	Document Scope: Departmental	
	Document Type: Clinical Practice Guideline Approved on 2019-06-10 Next Review Date: 2021-06-09	
	Laparoscopic Cholecystectomy Care Pathway	Version: 1

Introduction


This pathway was developed by an interdisciplinary clinical group from SickKids using research knowledge, clinical experience and consensus agreement. This pathway is a general guideline and does not represent a professional care standard governing providers' obligations to patients. Care is revised to meet individual patient needs.

Target Population

- Children aged 2-18 years old who have undergone a laparoscopic cholecystectomy by the General Surgery Team;
- Patients are to be removed from this pathway if there are significant underlying disease, significant postoperative complications (e.g. bowel obstruction or prolonged TPN) or a change in diagnosis; and
- **If a patient has Sickle Cell Disease please consult hematology for guidance on fluids, oxygen, and pain management. These patients are pre-admitted the day before surgery***

Target Users

- Surgeons, residents, fellows and nurses on ward.

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Laparoscopic Cholecystectomy Care Pathway Expected Date of Discharge: within 24 hours post-op

	PRE-OPERATIVE	IMMEDIATELY POST-OPERATIVELY	POST-OP DAY # 0	DISCHARGE
GOALS	<ol style="list-style-type: none"> Hydration maintained Adequate pain control Patient prepared for OR Child/family are advised of pre-op bath. Wipes to be used upon arrival. Refer to procedure document 	<ol style="list-style-type: none"> Afebrile Adequate pain control Ambulation as tolerated Able to tolerate clears (immediately post-op) Incision intact, no drainage; dry and intact 	<ol style="list-style-type: none"> Afebrile Adequate pain control Ambulating Able to tolerate diet Incision dry & intact 	<ol style="list-style-type: none"> Afebrile Adequate pain control Ambulating Able to tolerate diet Incision dry and intact Child/ caregiver teaching completed Family understands discharge teaching
PHYSICAL EXAM	<ul style="list-style-type: none"> Obtain history Complete physical exam Assess vital signs Complete pain assessment (refer to Pain Assessment Guidelines) Ensure child has adequate pain control (refer to Pain Management Guidelines) 	<ul style="list-style-type: none"> Complete pain assessment every 4 hours Ensure child has adequate pain control (refer to Pain Management Guidelines) Monitor vital signs as per BPews Obtain accurate in and out Complete wound assessment Complete abdominal assessment Assess for jaundice 	<ul style="list-style-type: none"> Complete pain assessment every 4 hours Ensure child has adequate pain control (refer to Pain Management Guidelines) Monitor vital signs as per BPews Obtain accurate in and out Assess for jaundice Complete wound assessment Complete abdominal assessment Remove surgical dressing but leave steri strips 	
DIET & IV FLUIDS	<ul style="list-style-type: none"> Ensure NPO 	<ul style="list-style-type: none"> Clear fluids to diet as tolerated Administer D5W/0.9 NaCl with 20mmol KCL/L at maintenance Bolus as indicated Refer to Fluid and Electrolyte Guidelines 	<ul style="list-style-type: none"> Clear fluids to diet as tolerated Administer D5W/0.9 NaCl with 20mmol KCL/L at maintenance until adequate oral fluid intake TKVO once adequate oral fluid intake 	<ul style="list-style-type: none"> Diet as tolerated
LABS & MEDICATION	<ul style="list-style-type: none"> Complete CBC and differential Cross and type 	<ul style="list-style-type: none"> Labs as clinically indicated If pain/fever, administer acetaminophen as indicated Ketorolac/ibuprofen every 6 hours as needed for pain Morphine as indicated 	<ul style="list-style-type: none"> Labs as clinically indicated If pain/fever, administer acetaminophen as indicated Ketorolac/ibuprofen every 6 hours as needed for pain 	<ul style="list-style-type: none"> If needed, provide prescription for oral medication
ACTIVITY & EDUCATION	<ul style="list-style-type: none"> Activity: as tolerated Consent for surgery Pre-op procedures for child and caregiver 	<ul style="list-style-type: none"> Activity: out of bed to chair and ambulating in hallway X5 Review when diet will start Review need for pain management Review need for mobility Review need for parental involvement in care 	<ul style="list-style-type: none"> Activity: out of bed to bathroom and ambulating in hallway at least 5 times Review incision care: leave steri strips until they fall off or remove after 10 days Review bathing: may shower 48 hours after surgery and wash incision gently with soap and water May swim 48 hours post-op May return to normal activities of daily living as tolerated Review signs and symptoms of wound infection: fever, redness around incision, drainage from incision, increasing pain around incision, and fluid accumulation under incision 	<ul style="list-style-type: none"> Review when to call surgeon's office: wound infection, vomiting, fever, jaundice, and/or pain Confirm follow up appointment with primary surgeon 6-8 weeks post-op (if indicated) Book appointment with family doctor/pediatrician within 1 week Review post-op day # 1 teaching


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Related Documents

[Care of Patients Receiving Continuous Infusion of Opioids](#) ==> 

[Care of Patients Receiving Patient Controlled Analgesia](#) ==> 
[SickKids Formulary](#)

[Fluid & Electrolyte Administration in Children](#) ==> 

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References

1. Guidelines for preventing health-care-associated pneumonia, 2003 Recommendations of CDC and the Healthcare Infection Control Practices Advisory Committee (HICPAC)
2. RNAO Best Practice Guidelines: Assessment and Management of Pain (2007)
3. Mangram, A., Horan, T., Pearson, M., Silver, L. & Jarvis, W. (1999). [Guideline for Prevention of Surgical Site Infection 1999](#).
4. Balaguer, E., Price, M., & Burd, R. (2006). National trends in the utilization of cholecystectomy in children. **Journal of Surgical Research**, 134, 68-73.
5. Peter, S., Keckler, S., Nair, A., Andrews, W., Sharp, R., Snyder, C., Ostlie, D. & Holcomb, G. (2008). Laparoscopic cholecystectomy in the pediatric population. **Journal of Laparoendoscopic & Advanced Surgical Techniques**, 18, 127-130.
6. Siddiqui, S., Newbrough, S., Alterman, D., Anderson, A., & Kennedy, A. (2008). Efficacy of laparoscopic cholecystectomy in the pediatric population. **Journal of Pediatric Surgery**, 43, 109-113.
7. Goers, T., Panepinto, J., Debaun, M., Blinder, M., Foglia, R., Oldhan, K., & Field, J. (2008). Laparoscopic Versus Open Abdominal Surgery in Children with Sickle Cell Disease Is Associated With a Shorter Hospital Stay. **Pediatric Blood Cancer**, 50: 603-606.
8. Gowda, D., Agarwal, P., Bagdi, R., Subramanian, B., Kumar, M., Ramasundaram, M., Paramasamy, B., & Khanday, Z. (2009). Laparoscopic cholecystectomy for cholelithiasis in children. *Journal of Indian Association of Pediatric Surgeons*, 14(4), 204-206.
9. (Draft). Doyle, J., Nathens, A., Morris, A., Nelson, S. & McLeod, R. (2010). Guideline #4: Management of complicated intra-abdominal infections. *Best Practice in General Surgery*.

Guideline Group and Reviewers

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Implementation Plan

- Education and awareness building by General Surgery Program (Surgeons, NPs, fellows, nurse educator) at: fellow orientation (once per year) nursing orientation (every 3 months), and residents orientation (every month).
- Surgeons to communicate any updates in practice to Division of General Surgery.


Evaluation Plan

- Abdominothoracic Approach order set utilization
- Length of stay (LOS)
- Correlation between LOS and order set utilization

Attachments:

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