Gallstones (Cholelithiasis)

What are gallstones?
Gallstones are formed from cholesterol or bilirubin products which are excreted in bile by the liver. The liver normally produces bile. It drains into the first part of the small intestine where it aids in digestion. It is stored in the gallbladder between meals. Crystals can form when the bile is stored. As the crystals grow, they form gallstones (see figure).

How do people get gallstones?
Obesity, use of contraceptives, pregnancy, abnormalities of the red blood cells, and a genetic family tendency, lead to gallstone production.

How do I know if I/my child has gallstones?
• Usually you/your child will experience pain in the right upper or upper middle part of his/her abdomen or back, particularly after meals. Fatty or greasy foods are often most troublesome. Nausea and vomiting may also occur.
• An ultrasound can confirm the diagnosis of gallstones.

How are gallstones treated?
• Gallstones must be treated with surgery to remove the gallbladder. There are no successful medical treatments of gallstones either to dissolve the stones or to use ultrasound to pulverize them and let them pass spontaneously through the bile ducts.
• In most cases, the gallbladder containing the stones is removed. Removal of the stones alone is not adequate therapy. Stones will almost always reform in the gallbladder if it is not removed.

What is Laparoscopic Cholecystectomy?
• This is the name of the surgery you/your child will have to remove the gallbladder.
• You/Your child will need general anesthesia for the procedure.
• During surgery 4 small incisions will be made on your/your child’s abdomen, through which a telescope is passed to observe the operation as it is performed with instruments placed through the other three openings.
• You/Your child will have 4 small dressings (clear plastic bandage over gauze) on your/his/her abdomen.
• Rarely, an “open” procedure through an incision below the ribs may be necessary. This may be required if there is scarring, inflammation, bleeding or unusual anatomy of the common bile duct which prevents safe performance of the laparoscopy. Occasionally, a gallstone remains in the bile ducts after removal.
of the gallbladder. In most cases, the stone can be safely removed by passing a flexible telescope through the mouth and stomach into the first part of the intestine. With this telescope the stone can generally be removed from the common bile duct.

- After surgery you/your child will go to the recovery room for 1-2 hours, then to the surgical floor.
- You/Your child may drink fluids the evening after the operation.
- You/Your child will receive pain medicine through the IV the evening after the operation.
- The morning following the operation, if you/your child are/is not too nauseous, you/he/she may eat breakfast.
- You/Your child will be given a prescription for pain medication at time of discharge. Give pain medicine as prescribed and instructed by your doctor and nurse.
Home Care after Laparoscopic Cholecystectomy

Activity
• Once at home you/your child does not need to stay in bed. You/Your child can walk around normally.
• You/Your child should avoid rough play for several weeks following operation; for example, no sports, gym or bicycle riding.
• If any particular activity is uncomfortable, stop the activity until you/your child is more comfortable.
• You/Your child can return to school on ______________________________

Pain
• You/Your child may have some discomfort at home.
• Give pain medicine as prescribed and instructed by your doctor and nurse. This may help you/your child sleep.

Wound and Skin Care
• Your child will go home with a clear plastic dressing (bandage) over the incisions. Leave the dressing in place. Your child does not need to change it.
• The dressing will fall off by itself about 2 weeks after surgery. You may remove this approximately one week after surgery. When it does, leave the Steri-strips® (small pieces of tape) on until they fall off on their own.

Diet
Your child may eat anything he/she desires. The General Surgery department recommends eating light foods for 2-3 days and gradually increase to a regular diet as your child’s appetite returns. Drink plenty of fluids.

Bowel Movements
It may take 2-3 days for your child to have a normal bowel movement. Some patients may have diarrhea/loose stools for the first 3-4 weeks after surgery. Don’t be alarmed – the bowel movements will soon return to normal.

Bathing
Your child may take a shower two days after the operation if the incisions are covered with the clear plastic dressing.

When to call your child’s doctor
Call if your child:
• has an increase in redness or swelling around the wound/abdominal distention or tenderness;
• has persistent vomiting;
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- fails to have a bowel movement;
- has drainage or bleeding from the incision;
- has a fever of 100.5°F or higher;
- has severe pain that does not get better with pain medicine; or
- develops yellow color to the eyes or skin or dark brown colored urine.

Numbers to Call

<table>
<thead>
<tr>
<th>Monday – Friday 8:30am – 5:00pm</th>
<th>Nurses’ line (617) 355-7704</th>
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<tbody>
<tr>
<td></td>
<td>Nurse Practitioners’ line (617) 355-7716</td>
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<tr>
<td>Evening, Nights, Weekends, and Holidays</td>
<td>Page Operator (617) 355-6369</td>
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<td>Ask for the surgeon on-call.</td>
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Follow-up Appointment

Please schedule a follow-up appointment with your child’s surgeon 2 to 3 weeks after surgery.

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A **Spanish** version of this is available from your provider

Send comments or questions to: Familyed@childrens.harvard.edu