

Let's Talk About...

Solid Organ Injuries

A blow to the belly can injure one of the three “solid” organs in the belly: the liver, spleen, and kidney. The biggest concern is bleeding in the belly. This handout will tell you the usual care for a child with these injuries and answer some common questions.

Injuries to the “solid” organs can cause bleeding inside, but can also cause the organs to not work well. See illustration to the left.

- The liver and spleen filter the blood and the liver produces bile. Bile is important in digestion. Injury to these organs can cause bleeding into the belly. Your child may need to stay in the hospital for a few days while the doctors watch for bleeding.
- The kidneys filter the blood and make urine to remove waste from the body. If your child has an injury to the kidneys, the nurses and doctors will watch the amount and color of your child's urine to make sure the kidneys are still working correctly.

How does the doctor diagnose these injuries?

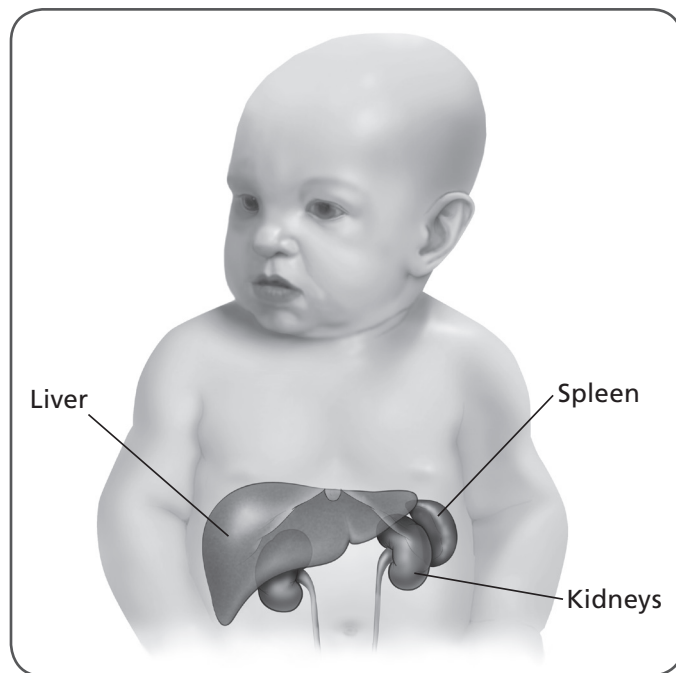
Your doctor will order tests to see if your child's solid organs are injured. These tests may include a special x-ray called a CT (computerized tomography) scan, or an ultrasound. These tests give the doctor a view of the injury on a computer screen.

After these tests, the doctor gives your child's injury a grade from 1 to 5 or 6. A grade 1 injury is the least injured, and a grade 6 is the most injured.

How long will my child be in the hospital?

The number of days your child will be in the hospital depends on the grade of her injury, and whether she has other injuries.

For severe injuries, your child may be in the pediatric intensive care unit (PICU) for 1 to 2 days. In rare



cases the child may require surgery to stop the bleeding.

Laboratory tests

Your child will have blood tests for her blood count (called a “hematocrit”). This is to find out how much bleeding has occurred and if bleeding is still happening inside. Your child may need this blood test several times a day for the first few days, and then less often when the tests show no more bleeding.

If your child's kidneys are injured, she may have blood tests for BUN or creatinine. The kidneys make BUN and creatinine. These tests tell how well your child's kidneys are working.

Will my child have other treatments while in the hospital?

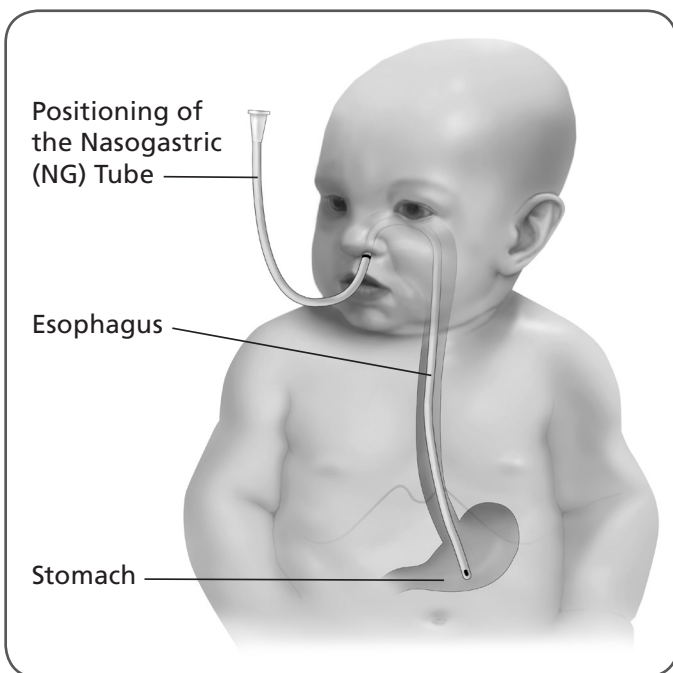
Breathing exercises

Your child will have deep breathing exercises in the hospital. If your child lies in bed and doesn't breathe

deeply, she can get pneumonia. When your stomach hurts it is also more difficult to breathe deeply. The exercises make your child breathe deeply and prevent pneumonia. Older children use an “incentive spirometer”. Younger children blow bubbles. You can help your child do these exercises often while they are awake. The hospital staff will teach you how to do this.

Nasogastric (NG) tube

Your child may have a nasogastric (NG) tube placed through the nose and into the stomach. An injury to the belly can make the intestines stop working. Swallowed spit, stomach juices, and bile (a fluid from the liver that helps with digestion) collect in the stomach. If the intestines do not work, the fluids stay in the stomach and make your child feel like she is going to throw up. This tube sucks all those fluids out of the stomach. The tube may be a little uncomfortable. It is helpful to reassure your child so she doesn't pull the tube out. When the intestines start to work, there is less fluid sucked out, and the stomach fluid is lighter in color. Then the tube is ready to come out.



Nutrition and what your child can eat

Your child cannot eat or drink until the NG tube comes out and the intestines work. Your child will receive intravenous (IV) fluids to give her enough

liquid. Some children have a special IV fluid with more nutrition in it. Your child will probably be able to eat normal foods after 2 to 5 days of gradually getting more and more normal food. Sometimes children feel nauseated or sick to their stomach. The nurse can give a medication to help with this if it is occurring.

Foley catheter

Your child may need to have a tube to drain urine called a Foley catheter, this tube allows your child's nurse to collect and measure the urine. This is a good way to tell how well the kidneys are working. The Foley catheter will come out as soon as possible.

Activity

Your child will have to stay in bed for the first 1 to 4 days. This prevents more bleeding in the belly. When there is no more bleeding, your child can get out of bed and go to the bathroom. As she continues to heal, she will be able to get out of bed more often and for a longer time.

When your child goes home from the hospital, the only activity she should do is walking. It is especially important that she not do any activities that have contact or quick movement. She should not lift, run, bike, rollerblade, use a trampoline, ride a horse or an ATV, or play soccer, football, or any other contact sports.

If your child had a minor injury, she may be able to do all her regular activities after 4–6 weeks. If your child had a more serious injury, she may need to wait 8–12 weeks to return to do all her regular activities. This is so her organs can heal completely. Be sure to check with your child's doctor.

What can I do for my child after the hospital?

School

Your child can go back to school after she is able to do all her regular activities. You may have to make plans for homebound school services. Talk to your child's doctor about when she can go back to school.

Follow-up clinic visit

Your child may need to go to their primary care doctor for a check-up and follow-up visit after going home from the hospital. You should make this appointment for about a week after leaving the hospital. You will have instructions on your discharge paperwork.

What if I have more questions?

If you have questions, talk with your child's nurse, nurse practitioner, or doctor. If you have questions when you are home, call your child's pediatrician or health care provider.