

Liver Injuries

ALERT: In an emergency call 911

What is the liver?

The liver is an organ in the upper right part of the abdomen. It is made up of two main lobes.

The liver helps break down foods and medicines in the blood. This makes it easier for the body to absorb and use them.

What is a liver injury?

A liver injury could be simple bruises or small tears. In some cases the liver is torn into many pieces. This could cause damage to major blood vessels around the liver.

What causes liver injuries?

Most liver injuries are caused by trauma to the upper right part of the abdomen. The most common causes of these injuries are from motor vehicle crashes, falls and sports injuries.

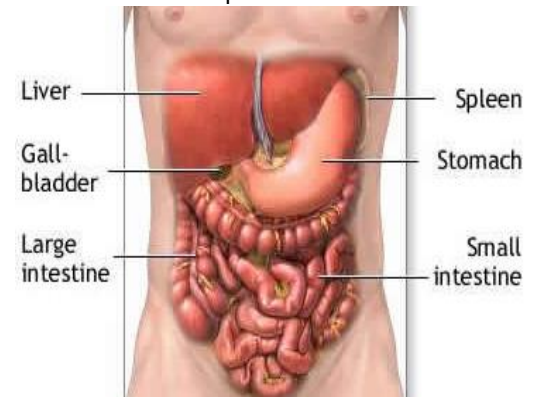
Liver injuries can be life-threatening. If you think there has been a liver injury, have your child checked by a health care provider immediately.

What are the symptoms?

- Pain in the upper right abdomen.
- Pain in the right shoulder.
- Dizziness or lightheadedness.
- Nausea or vomiting.
- Weak and/or fast pulse.

How are they diagnosed?

- A CT scan is done to diagnose a liver injury. The scan will show how badly the liver is injured. If an injury is found, your child will be admitted to the hospital.
- The injury is given a grade. The grade is based on how bad the injury is. Grade 1 is the least injured and grade 5 is the most severe. This grade helps us decide how long your child will:
 - be on bed rest.
 - have activities limited.



Injury Grade	Description of injury	Nights of bed rest	Weeks of limited activity
1	Small tear or bruise on the surface of the liver	1	3
2	Tear in the liver, less than 3 cm (1") deep	1	4
3	Deep tear in the liver, greater than 3 cm (1") deep	2	5
4	Multiple tears or a crush injury	2	6
5	Shattered liver	2	7

How are they treated?

- Most liver injuries heal without surgery. Being on bed rest in the hospital for will help your child's liver heal.
- The liver has a large blood supply. If a liver injury does not heal, internal bleeding can result. This is an emergency and surgery is needed. The surgery will repair the liver and stop the bleeding.
- Your child will have regular blood tests to see if the bleeding has stopped. Once the bleeding has stopped, the tests will be stopped.
- Liver injuries often can be painful. Your child may need pain medicine while in the hospital and for a short time after going home. Pain medicine can cause hard stools. Your child will need a stool softener while on pain medicines.
- During the weeks of limited activity, your child may go to school, read books, do light housework, go for walks and swim in well-supervised areas. Your child may not do any sports, lift weights, go to recess or gym class or do any rough activities that may re-injure the liver.

What follow-up care is needed?

Your child will need to be seen in the Surgery Clinic after the weeks of restricted activity is done. At this time if the signs and symptoms from the liver injury are gone, your child will be able to go back to all activities.

ALERT: Call your child's doctor, nurse, or clinic if you have any questions or concerns or if your child has:

- A fever of 101.5° F (38.6°) or higher.
- Nausea or Vomiting.
- More abdominal pain.
- Dizziness or lightheadedness.
- Special health care needs that were not covered by this information.

This sheet was created to help you care for your child or family member. It does not take the place of medical care. Talk with your healthcare provider for diagnosis, treatment and follow-up.