Liver (Hepatic) Hemangiomas

What are liver hemangiomas? (Pronounced [hi-man-jee-oh-muh])
- A hemangioma is a benign (not caused by cancer) tumor found on your skin or in one of the organs inside your body. It is made of a dense tangle of blood vessel cells.
- Hemangiomas usually occur on the skin.
- Your liver is the most common place for a hemangioma to occur inside your body.
- If you have a liver hemangioma, you may or may not have skin hemangiomas.
- If you have 5 or more skin hemangiomas, you should get a test to check for liver hemangiomas. This test is called an ultrasound (US).

How often do hemangiomas occur?
- Skin hemangiomas are common. About 1 in 10 (10%) of people will have one or more when they are born.
- Liver hemangiomas are less common, but we don’t know exactly how many people have them.

What causes liver hemangiomas?
- Doctors and scientists are not sure what causes liver hemangiomas.

Are all liver hemangiomas the same?
- There are three different types of liver hemangiomas: focal (single) tumors, multifocal tumors, and diffuse tumors.
- Each type affects your body differently, so they are treated in different ways.

Focal or Single tumors
- These develop on the liver before a baby is born. If they are large, they might be diagnosed before birth if they are seen on an ultrasound.
- These tumors do not grow or multiply after a baby is born.
- Some will shrink (involute) quickly after birth without any complications and disappear by the time a baby is 16 months old (Rapidly Involuting Congenital Hemangioma or RICH).
- Some may not change in size (Non Involuting Congenital Hemangioma or NICH).

Multifocal or Diffuse tumors
- Also called Infantile Hepatic Hemangiomas (IHH).
- These are similar to the common “strawberry” hemangiomas of the skin.
- A baby will often have skin hemangiomas along with these.
- These tumors grow in size and number after a baby is born.
- Growth of the tumors slows down by 1 year of age, and they shrink over a 6-10 year period.

How are liver hemangiomas diagnosed?
- A baby will be screened with a liver ultrasound if they have 5 or more skin hemangiomas (any size).
- Hemangiomas show up on US, MRI or CT scan. When a baby needs to have one of these tests done for other medical reasons, doctors may notice hemangiomas on the images of the liver as well.
- Liver hemangiomas may be found when evaluating a baby with a large liver, failure to thrive, abdominal distension, or feeding difficulty.
- Certain abnormal laboratory results may be a sign of a hemangioma (low platelets, low thyroid hormone, anemia, abnormal liver or blood clotting tests).
- Rarely, a liver tumor that looks abnormal may need a biopsy to see whether it is a hemangioma or cancer.
How are liver hemangiomas treated?

- Most liver hemangiomas do not cause problems and will not need medical treatment.
- Even if treatment is not needed, it is important that hemangiomas are watched until they are completely gone or have stopped growing and are stable. This is usually done by regular liver ultrasounds and sometimes blood tests. A child with a liver tumor thought to be a hemangioma should be seen by a hemangioma specialist for this reason.
- A medicine called propranolol may be used. This is a pill or liquid you take by mouth.
- Sometimes, patients will take a steroid such as prednisone.
- Rarely, a hemangioma will need a biopsy or will need to be removed.
- A procedure called an embolization may be done in rare cases. This is when blood flow to the hemangioma is blocked so that the tumor will die.
- A liver transplant might be needed in some cases when diffuse tumors do not respond to other treatments.
- Your doctor will help you decide on the best treatment or monitoring for your baby.

Can liver hemangiomas cause complications?

- Most multifocal hemangiomas are found by chance during routine imaging and do not cause many problems.
- A large focal hemangioma may have bleeding inside of it. Bleeding can cause anemia, low platelets and a swollen belly.
- Shunting of blood (large amount of blood flow) in the tumor can cause heart failure.
- Diffuse tumors might take over the whole liver. This can cause serious problems like liver failure, thyroid problems, a condition called abdominal compartment syndrome (dangerous increase in pressure in the abdomen), or death.