Liver Biopsy

What is a Liver Biopsy and why is it done?
In a liver biopsy, the doctors insert a needle into your liver and remove a small piece of tissue to examine it for signs of disease or damage. Looking at liver tissue itself under the microscope is sometimes the best way to determine what is the problem with the liver.

Is any preparation necessary?
Before scheduling your biopsy, the doctor will do blood tests to make sure your blood clots properly. Be sure to mention any medications you take, especially aspirin or anticoagulants, as you will have to stop taking these medications for 5–7 days. You must not eat or drink anything for 6 hours before the biopsy. Your doctor will tell you whether to take your regular medications during the fasting period.

How is it done?
Liver biopsy is done at the hospital, often in the x-ray department. The doctor may use an ultrasound image of the liver to help guide the needle to a specific spot. For the biopsy, you will lie on a bed, on your back. After injecting a local anaesthetic to numb the area, the doctor will make a small incision in your right side near your rib cage, then insert the biopsy needle and retrieve a sample of liver tissue. The doctor will ask you to hold your breath for 5 to 10 seconds while he/she puts the needle in your liver. You will need to hold very still at this time. You will feel pressure and a dull pain.

Two other methods of liver biopsy are also possible. For a laparoscopic biopsy, the doctor inserts a tube called a laparoscope through an incision in the abdomen. The laparoscope has a camera that sends images of the liver to a TV monitor. The doctor watches the monitor and uses instruments to remove tissue samples from the liver. Transjugular biopsy involves inserting a fine tube called a catheter into a neck vein. The doctor puts a biopsy needle into the catheter and then guides it into the liver. Doctors use this procedure when patients have blood-clotting problems or fluid in the abdomen.
How long does it take?
The entire procedure takes about 15–20 minutes. After the biopsy, the doctor will put a dressing over the incision and have you lie on your right side, pressed against a towel or a pillow, for 1 to 2 hours. The nurse will monitor your vital signs. You should arrange for someone to take you home from the hospital since you will not be allowed to drive after having the sedative. You must go directly home and remain in bed (except to use the bathroom) for 8 to 12 hours, depending on your doctor's instructions. Also, avoid excessive physical exertion for the next week. Expect a little soreness at the incision site and possibly some pain in your right shoulder. This pain is caused by irritation of the diaphragm muscle and should disappear within a few days. Your doctor may recommend that you take Paracetamol for pain, but you must not take Aspirin or Ibuprofen for the next 5 days.

What are the possible complications?
Like any procedure, liver biopsy does have some risks. These include bleeding from the liver, puncture of the lung, infection, and pain. But these complications are rare.