Liver Biopsy Information

Description of the Procedure:
You will be on your back in a hospital gurney. An ultrasound is done to locate the liver and choose a space between the lower ribs on the right. The area is cleaned with a sterilizing solution. A local anesthetic is applied to the skin, muscle and liver surface. A very small (3 mm or 1/8 of an inch) cut in the skin is made with a sterile blade. A thin (3 mm or 1/8 inch) biopsy device is placed between the ribs, and then rapidly inserted into the liver and rapidly removed. The whole procedure from start to finish will take 15-20 minutes, but the needle will only be in your liver for an instant. The tissue removed is small (1-2 mm x 20 mm or 1/16 inch x ½ inch) and will be examined by a pathologist. A sterile dressing is applied, and you will stay for 3-4 hours of observation.

Risks: The following risks have been associated with a liver biopsy:

1. Puncture of organs. A puncture of a lung, intestine or the gallbladder occurs very rarely (less than 1 per 1000 liver biopsies). Bleeding from a punctured organ may require antibiotic therapy, a blood transfusion and/or surgery to repair the organ. Leakage of bile from the liver or gallbladder also may occur and require antibiotic therapy and/or surgery to repair. Collapse of a lung due to puncture could require the temporary placement of a chest tube. Puncture of the intestine could cause infection.

2. Bleeding. Bleeding may occur after a biopsy. Minor bleeding not requiring a blood transfusion occurs in 1 per 100 liver biopsies, but overnight hospitalization may be needed for observation. Major bleeding requiring a longer hospitalization, blood transfusion, surgery, or other treatments will vary depending upon your condition, but may be as likely as 1 per 2500 liver biopsies.

3. Other complications. Other complications may also occur, including inflammation or pain at the biopsy site, right flank, shoulder or hip after the procedure. Occasionally there may be pain with breathing. Such pain may occur in up to 3 in 10 patients, but the pain is typically mild, well-controlled with medication, and goes away in 12-48 hours.

4. Death. Death after a percutaneous liver biopsy is estimated to occur in 1 per 10,000 procedures.

Benefits:
The purpose of a percutaneous liver biopsy is to gain diagnostic information about the liver. Liver biopsy often provides information that cannot be obtained in any other way. The procedure is generally very safe and is well tolerated by most patients.

Alternative options:
A liver biopsy may be performed during surgery, which often requires general anesthesia with associated risks. Biopsies can also be done through a blood vessel in the neck by a radiologist. The risk of bleeding is less by this route, but there are other risks, and the biopsy obtained may be smaller than that obtained through the skin. Radiologic studies and blood tests are alternatives to a liver biopsy, but they do not provide the same information as a biopsy and therefore may be less helpful.