

## **Patient Information on Percutaneous Liver Biopsy**

### **Introduction**

The liver is an important organ and is responsible for many metabolic activities of the body. In patients with liver disease, accurate diagnosis of the cause of the disease can improve treatment. Although blood tests and ultrasound examination provide some clues, examination of the liver tissue provides much more valuable information for diagnosis. Liver biopsy involves the use of a special needle to obtain liver tissue through the skin. Patients with acute or chronic hepatitis, abnormal liver function tests, liver failure, cirrhosis, etc may be candidates for liver biopsy. It can provide information for making the diagnosis, predicting the prognosis and formulating the treatment plan.

### **The Procedure**

Prior to the procedure, local anaesthetic is injected at the site of biopsy. After the drug has taken effect, the doctor will make a small (about 1-2mm) incision on the skin. Doctor will ask the patient to hold the breath while piercing through the incision site with the biopsy needle into the liver to obtain tissue. About 1-2 cm of liver tissue will be obtained. In general, the procedure takes 10-15 minutes.

### **Risk and Complication**

After years of practice and research worldwide, liver biopsy has been shown to be safe and complications are uncommon. Studies showed that about 20% of the patients have mild pain in upper abdomen for several minutes to several hours after the procedure. A small number of patients have transient drop of blood pressure. About 1 in every 600 patients has minor internal bleeding and about 0.3-0.5% of patients has major bleeding that requires blood transfusion. Other complications include accidental injury of other organs like gallbladder, kidney, lung, intestine, etc. Serious complications may result in death (0.01%). In case of complications, patients may need radiological or surgical intervention.

### **Before the Procedure**

Patients need to be fasted for at least 6 hours before the procedure. If the patient has problem with blood clotting, it needs to be corrected first with transfusion of blood products. Patients should inform the medical staff of any major medical problems including diabetes, hypertension and continue their medications as instructed. Patients should also provide information concerning the current medications used especially antiplatelet and anticoagulation drugs and any allergic history. In patients using anticoagulation and antiplatelet drugs, they will be instructed to stop or modify the dosage of the medications.

### **After the Procedure**

After the biopsy, the medical and nursing staff will closely monitor the pulse and blood pressure of the patient. Patients may resume oral feeding when the condition is stable. Vigorous physical activity should be avoided within 2 weeks after the biopsy to prevent

bleeding from the biopsy site. Patients should attend the follow-up appointment as scheduled for the biopsy result. They should also follow the instructions of the medical staff regarding further use of medication.

### **Follow Up**

Patients can call up the ward within office hours for discomfort occurred after the procedure, or if the patients have any question about the examination result and drug treatment. However, if there are any serious events such as dizziness, collapse, severe abdominal pain, fever, etc, patients should seek medical attention at nearby Accident and Emergency Department.

### **Remarks**

This is general information only and the list of complications is not exhaustive. Other unforeseen complications may occasionally occur. In special patient groups, the actual risk may be different. For further information, please contact your doctor.