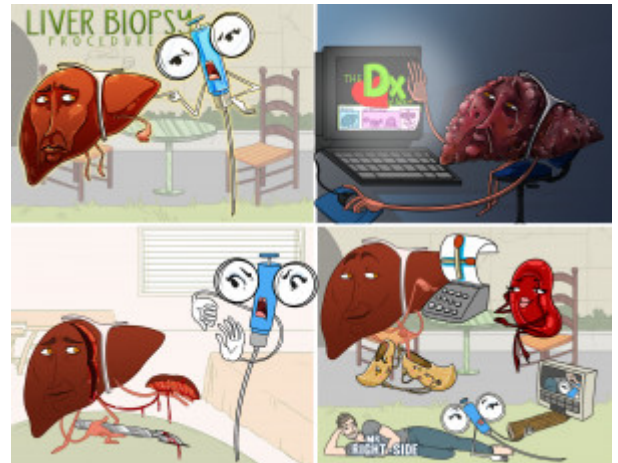


Liver Biopsy Procedure

A liver biopsy is performed to obtain a sample of hepatic tissue for histologic examination of the liver cells. Microscopic examination of the cells is done to determine the degree of inflammation, fibrosis, and cirrhosis, and ultimately to diagnose and track the progression of liver disease. There are two types of liver biopsies: incisional (open method) and needle biopsy (closed method). An incisional, liver biopsy is performed in the operating room with the patient under general anesthesia, while a needle biopsy is performed using only local anesthetic. It is important to remember that during a needle biopsy, the patient should be instructed to exhale fully and not to breathe during insertion of the needle. Prior to undergoing a liver biopsy, the patient's coagulation status should be assessed, and a type and crossmatch of the patient's blood should be performed in case of hemorrhage. After the procedure, the patient should be positioned on his/her right side for at least two hours and kept in a flat position for 12-14 hours after the procedure to prevent bleeding. Postoperatively, the patient should be monitored closely for complications such as bile peritonitis, shock due to hemorrhage, and pneumothorax.



PLAY PICMONIC

Indications

Diagnosis of Liver Disease

Diagnostic-computer and Liver Diseased

A liver biopsy is performed to obtain a sample of hepatic tissue for histologic examination of the liver cells. Microscopic examination of the cells is done to determine the degree of inflammation, fibrosis, and cirrhosis. Ultimately, this procedure is used to diagnose and track the progression of liver disease, such as liver fibrosis or chronic hepatitis.

Types of Liver Biopsy

Incisional (Open Method)

Incision

An incisional or open method liver biopsy is performed in the operating room with the patient under general anesthesia. During this procedure, a portion of hepatic tissue is removed through an incision.

Needle Biopsy (Closed Method)

Biopsy-needle

A closed liver biopsy or needle biopsy is performed with the patient in a supine position with the right arm over the head, using only local anesthetic. A needle biopsy involves inserting a needle between the patient's 6th/7th or 8th/9th intercostal space on the right side. The patient should be instructed to exhale fully and not to breathe during insertion of the needle.

Considerations

Coagulation Status

Clogs

Prior to undergoing a liver biopsy, the patient's baseline vital signs should be taken, and his/her coagulation status should be evaluated. Prothrombin time, clotting, and bleeding time should all be assessed.

Type and Crossmatch Blood

Type-writer and Cross-matches with Blood

A type and crossmatch of the patient's blood should be performed prior to undergoing the liver biopsy, in case the patient hemorrhages and needs to receive a blood transfusion.

Right-Side Lying

Right Side-lying Position

After the procedure, the patient should be positioned on his/her right side for at least two hours in an effort to prevent bleeding. Additionally, the patient should be kept in flat position 12-14 hours after liver biopsy procedure.

Post-Biopsy Monitoring

Post-Biopsy-needle and Monitor

After the biopsy, the patient should be assessed for complications including, but not limited to: bile peritonitis, shock due to hemorrhage, and pneumothorax.