Liver sonography serves as a useful complementary study of other hepatic investigations. Because of the echogenic nature of the normal liver parenchyma, fluid filled lesions within the liver, such as abscess, are clearly identified. Before making the diagnosis of abscess or cysts, one must be certain that the sonolucent structure does not represent a dilated gallbladder.

Fluid collections around the liver, such as subphrenic abscess, can be effectively evaluated by means of sonography. Fluid in such cases is located between the right hemidiaphragm and liver, as compared to right pleural effusion in which the fluid is , obviously , above the right hemidiaphragm.

Minimal ascites can be identified as collections of fluid around the liver , around the root of the mesentery, and adjacent to the urinary bladder.

In diffuse disease processes of the liver, as cirrhosis , congestive hepatomegaly, fatty infiltration , extensive infiltrative metastasis, ultrasound can detect

the changes in the normal appearance of the liver and its size in addition to other diagnostic data as splenomegaly, dilated hepatic veins, ascites, but no specific appearance for each of them. So the final diagnosis will depend on the biopsy.

The cirrhotic liver presents sonographically as increased echogenicity within the liver parenchyma. Bilharzial cirrhosis shows coarse pattern of the liver parenchyma with periportal fibrosis and evidence of portal hypertension.

The findings of ascites, increased echogenicity of the liver parenchyma and a normal biliary tree in a jaundiced patient is characteristic of hepato cellular, rather than obstructive.

In localized liver masses as abscesses , cysts metastasis, primary carcinoma, we found that ultrasound is an excellent primary tool for their diagnosis. Focal liver metastasis were easily diagnosed by its characteristic ultrasonic appearance. Moreover its response to irridation or chemotherapy can be followed by serial ultrasound

examination. Primary hepatic carcinoma can be diagnosed easily by its characteristic ultrasonic appearance especially by its indistinct margin which gradually blend by normal liver parenchyma. Intraheptic abscesses are easily diagnosed especially by its well defined margin and its contents. However, sometimes the internal pattern of these focal lesions became complex as necrotic metastasis, organised liver abscess during healing processes... etc., so its differentiation from those of other solid space - occupying lesions is difficult and we should depend on biopsy to reach the final diagnosis.

Ultrasound on other hand recognizes lesions approximately (1½ - 2 cms. in size) and can detail its internal composition. Moreover it can detect other organ pathology in the same sitting.

Our work has been performed on 39 patients , they are grouped into :

- Bilharzial cirrhosis	21	cases.
- Chronic infective hepatitis	10	cases.
- Amoebic abscess	1	case.
- Pyogenic abscess	2	cases.
- Primary carcinoma	1	case.
- Liver metastasis	4	cases.