Introduction

The liver is one of the most important organs in the human body that performs a number of metabolic functions that are essential to human life. The liver is the largest gland in the body. It is the second largest organ in the human body. Only the skin, which is considered to be an organ, is larger. In a normal adult, the he liver weighs about 1.5 kilograms grams or 3-4 pounds (about 2 percent of the body mass of adults). It is wedge-shaped occupying most of the right hypochondrium, epigasteruim and extends to the left hypochondrium. It is supplied by the portal vein and the hepatic artery and drained by the hepatic veins into the inferior vena cava ***(Davies and Coupland, 1967).***

Among the liver diseases are the primary vascular disorders of the liver, the relatively low prevalence of which may have contributed to the slow progress in uncovering the mechanisms of disease for each category of these disorders. The categories of these disorders vary according to the location of the circulatory impairment and include: - The Budd-Chiari syndrome, BCS (obstruction of the hepatic portion of the inferior vena cava), portal vein thrombosis and sinusoidal obstruction syndrome (veno-occlusive disease, nodular regenerative hyperplasia and peliosis hepatis). In addition, two systemic cardiovascular diseases that impair hepatic circulation; ischemic hepatitis and congestive hepatopathy ***(Laurie, 2003).***

Each of these diseases causes portal hypertension, but the frequency of parenchymal dysfunction varies among them and it is a characteristic of the primary circulatory liver diseases that portal hypertension usually precedes liver dysfunction; however, this is not the case with the primary parenchymal liver diseases, in which liver

dysfunction always progresses before portal hypertension is manifested ***(Laurie, 2003).***

Many cases are associated with polycythemia vera and other myeloprolliferative diseases, which may be subclinical, hypercoagulability, caval webs, constrictive pericarditis, right sided heart failure, neoplasia, paroxymal nocturnal hemoglobinuria and the use of the cytotoxic and contraceptive drugs ***(Dominique et al., 2009).***

Different techniques are available for assessments of the vascular system of the liver. Some of them are invasive and others are not. With the development of radiological techniques, more non invasive techniques are developed as Doppler US, CT scan, MRI and angiography ***(lasser et al., 1997).***Duplex Doppler ultrasoungraphy is the screening test of choice for these liver vascular disorders, which has sensitivity of about 85% for their detection ***(Marc and Jay, 2005).***

Prompt recognition and treatment of underlying haematological disorders and other treatable causes of Budd Chiari syndrome may avoid the need of the surgical decompression procedures as side to side porto caval, mesocaval, mesoatrial shunt and TIPS (transjugular intrahepatic portosystemic shunt), finally liver transplantation is considered in cirrhosis and hepatocellular dysfunction ***(Lawrence et al., 2003).***