SUMMARY

Hepatorenal syndrome is a reversible functional renal failure which occurs in patients with major liver disease and portal hypertension.

It is characterized by a marked decrease in glomerular filtration rate and renal plasma flow, and the circulatory dysfunction. There is no effective therapy for the HRS, the prognosis is very poor.

The patients'glomerular filtration rate and renal plasma flow have decreased before the increase of the serum creatinine and urea nitrogen, which is called subclinical HRS, which is could not be diagnosed by the normal renal function detection.

Because of the endotoxemia, diuresis and the hemorrhage of digestive tract, the subclinical HRS will become manifest HRS.

The renal dysfunction is functional and reversible, so the Doppler ultrasonography is helpful for the diagnosis of preclinical hepatorenal syndrome.

This study is to evaluate the value of Doppler ultrasonography used in the diagnosis of preclinical hepatorenal syndrome. Doppler ultrasonography was applied to detect the inner diameter of renal artery and the renal hemodynamic parameters in the hepatic fibrosis patients in various stages of the liver disease , whose renal function was normal, and the results were compared with those of the control group.

There was significant difference in the renal hemodynamic parameters in the form of RI and PI between the control group and children with liver fibrosis.