

# PAEDIATRIC PORTAL HYPERTENSION ULTRASOUND

## Ultrasound Assessment in Suspected Portal Hypertension

**Objective** To ensure that all staff follow correct procedure of evaluation in the Paediatric Patient when Portal Hypertension is suspected.

**Responsibility** All Sonographers, Trainee Sonographers, Registrars and Radiologists performing Paediatric ultrasound examinations.

**Frequency** For all Paediatric Ultrasound Examinations when Portal Hypertension is suspected as requested by a clinician and subsequently prioritized by a Radiologist for the following indications:

**Procedure** The following table describes the process to be followed for ultrasound examination of suspected Portal Hypertension in the Paediatric patient.

Step	Action
1	Look at old films/ultrasound, +/- report before starting.
2	Full abdominal ultrasound is performed as per protocol with examination extension to include:
3	AP diameter measurement of the Portal Vein
4	Doppler assessment/documentation of the Portal Vein
5	Image and document Superior Mesenteric Artery and Vein
6	Exam the liver with high frequency linear transducer to assess the liver echotexture for coarsening.
7	Assessment of Porta Hepatis, Para-aortic and Peri-splenic areas for identification of Varices.
8	Check the abdomen for ascites
9	Document and measure Splenic length.

### In the presence of Portal Vein Thrombosis:

1	Do a full pre-liver transplant work-up
2	Doppler assessment/documentation of right and left portal vein branches.
3	Measure/document diameter of Common Hepatic Artery and Doppler assessment/documentation.
4	Doppler assessment/documentation of the right, middle and left branches of the hepatic vein.
5	Doppler assessment/documentation of the IVC
6	Doppler assessment/documentation of the Splenic Vein
7	Check for re-canalization of the ductus venosum