

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