

# PAEDIATRIC APPENDICITIS ULTRASOUND

## Paediatric Appendicitis Ultrasound

**Objective** To ensure that all staff follow correct procedure of evaluation in the paediatric patient when appendicitis is suspected.

**Responsibility** All sonographers, trainee sonographers, registrars and radiologists performing paediatric ultrasound examinations.

**Frequency** For all paediatric ultrasound examinations when appendicitis is suspected as requested by a clinician and subsequently prioritized by a radiologist.

**Procedure** The following table describes the process to be followed for ultrasound examination of suspected appendicitis in the paediatric patient.

Step	Action
1	If bladder is full image and document the bladder first including ureteric jets.
2	In females also document the ovaries and uterus and take note if any free fluid is seen. Document flow in the ovaries with colour flow Doppler.
3	Pre/Post void bladder volume.
4	Perform a full abdominal scan as per the abdomen protocol.
5	Check liver echotexture for echogenic portal triads 'starry sky' appearance. This may be seen in intra-abdominal sepsis but can be non-specific.
6	Evaluate the lower right quadrant for appendix. Note: THIS SHOULD BE DONE WITH THE BLADDER BOTH FULL AND EMPTY.
7	Use the highest frequency possible linear array probe (relation to the child's size).
8	Using graded pressure examine the area from the hepatic edge to the right pelvis.
9	Look for the termination for the caecum and try to identify the appendix or an appendiceal mass. The appendix is seen as a blind ended tubular structure that should be no more than 6mm and compressible.
10	Note should be made that the appendix can be retro-caecal or sub-hepatic
11	Document any enlarged nodes within the mesentery and measure the transverse measurement of these nodes.