

Gastrointestinal applications

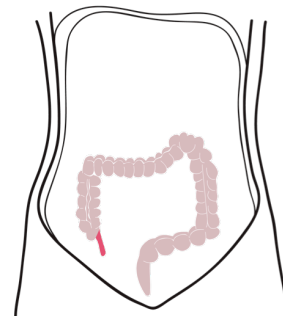
IMAGING THE APPENDIX

Ultrasound is an excellent test for diagnosing appendicitis, but depends on the skill of the operator and the patient anatomy. Ultrasound does not have perfect sensitivity, and a non-diagnostic scan requires additional testing.

Technique

The high frequency transducer is the best choice due to its excellent resolution. The curvilinear transducer can also be used, but if patient size requires its additional depth, the likelihood of a non-diagnostic study increases.

One approach to identify the appendix is to place the transducer at the point of maximal tenderness, and identify the relevant anatomy. The appendix appears as a blind-ending tube arising from the cecum.



The appendix arises from the cecum

An alternative approach is to trace the right (ascending) colon from the upper abdomen into the right lower quadrant. The right colon is typically gas-filled. As the gas dissipates in the right lower quadrant, the probe will have slid off the cecum, and be in the anticipated region of the appendix.

Anatomy

Typical right lower quadrant anatomy is depicted below. The psoas and iliac vessels typically lie deep to the appendix. A normal appendix may be difficult to identify.

