American College of Radiology
ACR Appropriateness Criteria®

Suspected Small-Bowel Obstruction

Variant 1: Suspected high-grade small-bowel obstruction (SBO), based on clinical evaluation or initial radiography (if performed).

Procedure	Appropriateness Category	SOE	Adults RRL	Peds RRL	Rating	Median	Final Tabulations								
							1	2	3	4	5	6	7	8	9
CT abdomen and pelvis with IV contrast	Usually appropriate		☢☢☢☢ 10-30 mSv	☢☢☢☢ 3-10 mSv [ped]	9	n/a	0	0	0	0	0	0	0	0	0
CT abdomen and pelvis without IV contrast	Usually appropriate		☢☢☢☢ 10-30 mSv	☢☢☢☢ 3-10 mSv [ped]	7	n/a	0	0	0	0	0	0	0	0	0
MRI abdomen and pelvis without and with IV contrast	May be appropriate		O 0 mSv	O 0 mSv [ped]	6	n/a	0	0	0	0	0	0	0	0	0
X-ray abdomen and pelvis	May be appropriate		☢☢☢ 1-10 mSv	☢☢☢ 0.3-3 mSv [ped]	5	n/a	0	0	0	0	0	0	0	0	0
CT abdomen and pelvis without and with IV contrast	May be appropriate		☢☢☢☢ 10-30 mSv	☢☢☢☢☢ 10-30 mSv [ped]	4	n/a	0	0	0	0	0	0	0	0	0
X-ray small bowel follow-through	May be appropriate		☢☢☢ 1-10 mSv	☢☢☢☢ 3-10 mSv [ped]	4	n/a	0	0	0	0	0	0	0	0	0
MRI abdomen and pelvis without IV contrast	May be appropriate		O 0 mSv	O 0 mSv [ped]	4	n/a	0	0	0	0	0	0	0	0	0
MR enteroclysis	Usually not appropriate		O 0 mSv	O 0 mSv [ped]	3	n/a	0	0	0	0	0	0	0	0	0

MR enterography	Usually not appropriate		O 0 mSv	O 0 mSv [ped]	3	n/a	0	0	0	0	0	0	0	0	0
CT enterography	Usually not appropriate		☢☢☢☢ 10-30 mSv	☢☢☢☢ 3-10 mSv [ped]	3	n/a	0	0	0	0	0	0	0	0	0
CT enteroclysis	Usually not appropriate		☢☢☢☢ 10-30 mSv	☢☢☢☢ 3-10 mSv [ped]	3	n/a	0	0	0	0	0	0	0	0	0
X-ray small bowel enteroclysis	Usually not appropriate		☢☢☢ 1-10 mSv		3	n/a	0	0	0	0	0	0	0	0	0
US abdomen and pelvis	Usually not appropriate		O 0 mSv	O 0 mSv [ped]	2	n/a	0	0	0	0	0	0	0	0	0

Variant 2: Suspected intermittent or low-grade SBO.

Procedure	Appropriateness Category	SOE	Adults RRL	Peds RRL	Rating	Median	Final Tabulations								
							1	2	3	4	5	6	7	8	9
CT abdomen and pelvis with IV contrast	Usually appropriate		☢☢☢☢ 10-30 mSv	☢☢☢☢ 3-10 mSv [ped]	8	n/a	0	0	0	0	0	0	0	0	0
MR enteroclysis	Usually appropriate		O 0 mSv	O 0 mSv [ped]	8	n/a	0	0	0	0	0	0	0	0	0
CT enteroclysis	Usually appropriate		☢☢☢☢ 10-30 mSv	☢☢☢☢ 3-10 mSv [ped]	8	n/a	0	0	0	0	0	0	0	0	0
X-ray small bowel enteroclysis	Usually appropriate		☢☢☢ 1-10 mSv		7	n/a	0	0	0	0	0	0	0	0	0
CT abdomen and pelvis without IV contrast	May be appropriate		☢☢☢☢ 10-30 mSv	☢☢☢☢ 3-10 mSv [ped]	6	n/a	0	0	0	0	0	0	0	0	0
X-ray small bowel follow-through	May be appropriate		☢☢☢ 1-10 mSv	☢☢☢☢ 3-10 mSv [ped]	5	n/a	0	0	0	0	0	0	0	0	0

CT enterography	May be appropriate		☢☢☢☢ 10-30 mSv	☢☢☢☢ 3-10 mSv [ped]	5	n/a	0	0	0	0	0	0	0	0	0
MR enterography	May be appropriate		O 0 mSv	O 0 mSv [ped]	5	n/a	0	0	0	0	0	0	0	0	0
X-ray abdomen and pelvis	May be appropriate		☢☢☢ 1-10 mSv	☢☢☢ 0.3-3 mSv [ped]	4	n/a	0	0	0	0	0	0	0	0	0
MRI abdomen and pelvis without IV contrast	May be appropriate		O 0 mSv	O 0 mSv [ped]	4	n/a	0	0	0	0	0	0	0	0	0
MRI abdomen and pelvis without and with IV contrast	May be appropriate		O 0 mSv	O 0 mSv [ped]	4	n/a	0	0	0	0	0	0	0	0	0
CT abdomen and pelvis without and with IV contrast	Usually not appropriate		☢☢☢☢ 10-30 mSv	☢☢☢☢☢ 10-30 mSv [ped]	3	n/a	0	0	0	0	0	0	0	0	0
US abdomen and pelvis	Usually not appropriate		O 0 mSv	O 0 mSv [ped]	2	n/a	0	0	0	0	0	0	0	0	0

Appendix Key

A more complete discussion of the items presented below can be found by accessing the supporting documents at the designated hyperlinks.

Appropriateness Category: The panel's recommendation for a procedure based on the assessment of the risks and benefits of performing the procedure for the specified clinical scenario.

SOE: Strength of Evidence. The assessment of the amount and quality of evidence found in the peer reviewed medical literature for an appropriateness recommendation.

- **References:** The citation number and PMID for the reference(s) associated with the recommendation.
- **Study Quality**: The assessment of the quality of an individual reference based on the number of study quality elements described in the reference.

RRL: Relative Radiation Level. A population based assessment of the amount of radiation a typical patient may be exposed to during the specified procedure.

Rating: The final rating (1-9 scale) for the procedure as determined by the panel during rating rounds.

Median: The median rating (1-9 scale) for the procedure as determined by the panel during rating rounds.

Final tabulations: A histogram showing the number of panel members who rated the procedure as noted in the column heading (ie, 1, 2, 3, etc.).

Additional supporting documents about the AC methodology and processes can be found at **www.acr.org/ac.**