

**American College of Radiology**  
**ACR Appropriateness Criteria®**

## Anorectal Disease

**Variant 1: Suspected perianal disease. Abscess or fistula. Initial imaging.**

Procedure	Appropriateness Category	SOE	Adults RRL	Peds RRL	Rating	Median	Final Tabulations								
							1	2	3	4	5	6	7	8	9
MRI pelvis without and with IV contrast	Usually appropriate	Limited	O 0 mSv	O 0 mSv [ped]	9	9	0	0	0	0	0	0	3	2	12
		References		Study Quality											
		23 (26643166)		4											
		19 (25038854)		3											
		24 (21348010)		3											
		22 (17805919)		4											
		21 (16773294)		4											
		18 (28218881)		4											
		17 (9606374)		4											
		20 (9694465)		3											
CT pelvis with IV contrast	Usually appropriate	Limited	⊕⊕⊕ 1-10 mSv	⊕⊕⊕⊕ 3-10 mSv [ped]	7	7	0	0	0	0	2	4	5	3	3
		References		Study Quality											
		11 (21337873)		3											
		12 (8119208)		4											
MRI pelvis without IV contrast	May be appropriate	Limited	O 0 mSv	O 0 mSv [ped]	6	6	0	0	0	2	2	5	3	5	0
		References		Study Quality											
		23 (26643166)		4											

[illegible]

				14 (25469082)	4										
				15 (27034072)	4										
				13 (1993416)	4										
				16 (3971802)	4										
Fluoroscopy contrast enema	Usually not appropriate	Expert Consensus	☼☼☼ 1-10 mSv	☼☼☼☼ 3-10 mSv [ped]	2	2	7	6	1	1	1	1	0	0	0
Radiography pelvis	Usually not appropriate	Expert Consensus	☼☼ 0.1-1mSv	☼☼ 0.03-0.3 mSv [ped]	1	1	12	4	1	0	0	0	0	0	0

**Variant 2: Suspected rectal fistula. Rectovesicular or rectovaginal. Initial imaging.**

Procedure	Appropriateness Category	SOE	Adults RRL	Peds RRL	Rating	Median	Final Tabulations								
							1	2	3	4	5	6	7	8	9
CT pelvis with IV contrast	Usually appropriate	Limited	☼☼☼ 1-10 mSv	☼☼☼☼ 3-10 mSv [ped]	7	7	0	0	0	0	2	2	5	4	4
		References		Study Quality											
		1 (22350172)		4											
		35 (2335606)		4											
MRI pelvis without and with IV contrast	Usually appropriate	Limited	○ 0 mSv	○ 0 mSv [ped]	7	7	0	0	1	1	1	3	3	5	3
		References		Study Quality											
		43 (11856710)		4											
Fluoroscopy contrast enema	May be appropriate	Limited	☼☼☼ 1-10 mSv	☼☼☼☼ 3-10 mSv [ped]	6	6	0	0	0	0	6	4	4	0	0
		References		Study Quality											
		36 (8620810)		4											
		37 (5909230)		4											
		38 (6608228)		4											

Fluoroscopy cystography	May be appropriate	Limited	☼☼☼ 1-10 mSv		6	6	0	0	0	0	5	6	3	0	0
		References	Study Quality												
		39 (9248120)	4												
Fluoroscopy vaginography	May be appropriate	Limited	☼☼☼ 1-10 mSv		6	6	0	0	0	0	5	7	1	1	0
		References	Study Quality												
		36 (8620810)	4												
		40 (28355089)	4												
		41 (14068403)	4												
		42 (14206630)	4												
MRI pelvis without IV contrast	May be appropriate	Limited	○ ○ mSv	○ ○ mSv [ped]	5	5	0	0	1	1	7	5	0	0	0
		References	Study Quality												
		43 (11856710)	4												
US pelvis transrectal	May be appropriate	Limited	○ ○ mSv	○ ○ mSv [ped]	5	5	1	0	0	1	7	5	0	0	0
		References	Study Quality												
		45 (27053063)	4												
		44 (10458131)	3												
CT pelvis without IV contrast	Usually not appropriate	Limited	☼☼☼ 1-10 mSv	☼☼☼☼ 3-10 mSv [ped]	3	3	0	2	7	3	2	0	0	0	0
		References	Study Quality												
		1 (22350172)	4												
		35 (2335606)	4												
CT pelvis without and with IV contrast	Usually not appropriate	Limited	☼☼☼☼ 10-30 mSv	☼☼☼☼ 3-10 mSv [ped]	3	3	1	2	10	0	0	0	0	1	0
		References	Study Quality												
		1 (22350172)	4												
		35 (2335606)	4												



		55 (16985109)	4												
		18 (28218881)	4												
		54 (27315072)	3												
		17 (9606374)	4												
Fluoroscopy contrast enema	May be appropriate	Limited	☼☼☼ 1-10 mSv	☼☼☼☼ 3-10 mSv [ped]	4	4	1	1	5	6	1	2	0	0	1
		References	Study Quality												
		52 (2152979)	4												
CT pelvis without IV contrast	Usually not appropriate	Expert Consensus	☼☼☼ 1-10 mSv	☼☼☼☼ 3-10 mSv [ped]	3	3	0	2	8	3	1	0	0	0	0
CT pelvis without and with IV contrast	Usually not appropriate	Expert Consensus	☼☼☼☼ 10-30 mSv	☼☼☼☼ 3-10 mSv [ped]	3	3	0	3	8	2	0	0	1	0	0
FDG-PET/CT skull base to mid-thigh	Usually not appropriate	Limited	☼☼☼☼ 10-30 mSv	☼☼☼☼ 3-10 mSv [ped]	3	3	4	1	4	3	3	2	0	0	0
		References	Study Quality												
		51 (21078803)	2												
		49 (29564671)	3												
		50 (21833729)	4												
US pelvis	Usually not appropriate	Limited	0 0 mSv	0 0 mSv [ped]	3	3	4	2	5	3	2	0	1	0	0
		References	Study Quality												
		56 (28755790)	4												
WBC scan abdomen and pelvis	Usually not appropriate	Limited	☼☼☼☼ 10-30 mSv		3	3	5	1	6	3	1	0	1	0	0
		References	Study Quality												
		57 (2104730)	4												
Radiography pelvis	Usually not appropriate	Expert Consensus	☼☼ 0.1-1mSv	☼☼ 0.03-0.3 mSv [ped]	1	1	13	3	1	0	0	0	0	0	0

**Variant 4: Suspected complication postproctectomy or coloproctectomy or colectomy with pouch or other anastomosis. Initial imaging.**

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	Limited	⊕⊕⊕⊕ 1-10 mSv	⊕⊕⊕⊕⊕ 3-10 mSv [ped]	8	8	1	0	0	0	0	0	4	5	4
		References	Study Quality												
		61 (24156793)	3												
		60 (17245179)	4												
CT pelvis with IV contrast	Usually appropriate	Limited	⊕⊕⊕⊕ 1-10 mSv	⊕⊕⊕⊕⊕ 3-10 mSv [ped]	8	8	0	0	0	0	2	2	1	9	3
		References	Study Quality												
		61 (24156793)	3												
		60 (17245179)	4												
MRI pelvis without and with IV contrast	Usually appropriate	Limited	○ ○ mSv	○ ○ mSv [ped]	7	7	0	0	0	0	1	5	4	5	2
		References	Study Quality												
		19 (25038854)	3												
		62 (20049948)	4												
		18 (28218881)	4												
		65 (9676464)	4												
		17 (9606374)	4												
Fluoroscopy contrast enema	May be appropriate	Limited	⊕⊕⊕⊕ 1-10 mSv	⊕⊕⊕⊕⊕ 3-10 mSv [ped]	6	6	1	0	0	0	3	5	3	2	3
		References	Study Quality												
		62 (20049948)	4												
		63 (17579147)	3												
		64 (19886140)	4												

CT abdomen and pelvis without IV contrast	May be appropriate	Limited	☹☹☹ 1-10 mSv	☹☹☹☹ 3-10 mSv [ped]	5	5	1	0	0	5	5	2	1	0	0
		References		Study Quality											
		61 (24156793)		3											
		60 (17245179)		4											
CT pelvis without IV contrast	May be appropriate	Limited	☹☹☹ 1-10 mSv	☹☹☹☹ 3-10 mSv [ped]	5	5	1	0	2	5	4	4	1	0	0
		References		Study Quality											
		61 (24156793)		3											
		60 (17245179)		4											
MRI pelvis without IV contrast	May be appropriate	Limited	○ ○ mSv	○ ○ mSv [ped]	5	5	0	0	1	0	7	4	2	0	0
		References		Study Quality											
		19 (25038854)		3											
		62 (20049948)		4											
		18 (28218881)		4											
		65 (9676464)		4											
		17 (9606374)		4											
CT abdomen and pelvis without and with IV contrast	Usually not appropriate	Limited	☹☹☹☹ 10-30 mSv	☹☹☹☹☹ 10-30 mSv [ped]	3	3	2	2	7	1	1	1	0	0	0
		References		Study Quality											
		61 (24156793)		3											
		60 (17245179)		4											
CT pelvis without and with IV contrast	Usually not appropriate	Limited	☹☹☹☹ 10-30 mSv	☹☹☹☹ 3-10 mSv [ped]	3	3	1	1	10	1	0	0	0	1	0
		References		Study Quality											
		61 (24156793)		3											
		60 (17245179)		4											

Radiography abdomen and pelvis	Usually not appropriate	Expert Consensus	☢☢☢ 1-10 mSv	☢☢☢ 0.3-3 mSv [ped]	3	3	3	2	4	6	0	2	0	0	0
US pelvis transrectal	Usually not appropriate	Expert Consensus	○ 0 mSv	○ 0 mSv [ped]	2	2	7	2	5	2	0	0	1	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](http://www.acr.org/ac).