American College of Radiology ACR Appropriateness Criteria®

Anorectal Disease

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

| | Appropriatene | ess | | | | | | | F | inal | Tabu | latio | ns | | |
|---|---------------------|---------------|-----------------|--|-----------|--------|---|---|---|------|------|-------|----|---|----|
| Procedure | Category | SOE | Adults RRI | L Peds RRL | Rating | Median | 1 | 2 | 3 | 4 | 5 | | | 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 | | Stud | y Quality | | | | | | | | | | |
| | | 23 (26643166) | | | 4 | | | | | | | | | | |
| | | 19 (25038854) | | | 3 | | | | | | | | | | |
| | | 24 (21348010) | | | 3 | | | | | | | | | | |
| | | 22 (17805919) | | | 4 | | | | | | | | | | |
| | | 21 (16773294) | | | 4 | | | | | | | | | | |
| | | 18 (28218881) | | | 4 | | | | | | | | | | |
| | | 17 (9606374) | | | 4 | | | | | | | | | | |
| | | 20 (9694465) | | <u>, </u> | 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 | | Stud | y 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 | | Stud | y 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 | | <u> </u> | | | | | | | | |
| CT pelvis without IV contrast | May be appropriate | Limited | ≎≎≎ 1-10 mSv | ���� 3- 10 mSv [ped] | 5 | 5 | 1 | 1 | 1 | 4 | 6 | 3 | 1 | 0 | 0 |
| | | References | | Stud | y Quality | | | | | | | | | | |
| | | 11 (21337873) | | | 3 | | | | | | | | | | |
| | | 12 (8119208) | | | 4 | | | | | | | | | | |
| US endoanal | May be appropriate | Limited | O 0 mSv | O 0 mSv [ped] | 5 | 5 | 1 | 0 | 2 | 4 | 2 | 5 | 0 | 0 | 0 |
| | | References | | Stud | y Quality | | | | | | | | | | |
| | | 25 (25364961) | | | 4 | | | | | | | | | | |
| | | 30 (14530683) | | | 4 | | | | | | | | | | |
| | | 26 (15690671) | | | 4 | | | | | | | | | | |
| | | 29 (8253014) | | | 4 | | | | | | | | | | |
| | | 27 (28708274) | | | 3 | | | | | | | | | | |
| | | 28 (15498901) | | | 2 | | | | | | | | | | |
| | | 31 (30607867) | | | 3 | | | | 1 | | | | | | |
| CT pelvis without and with IV contrast | Usually not appropriate | Limited | ଡଡ଼ଡ଼ 10-30 mSv | 0 | 3 | 3 | 0 | 2 | 11 | 0 | 0 | 1 | 0 | 0 | 0 |
| | | References | | Stud | y Quality | | - | | | | | | | | |
| | | 11 (21337873) | | | 3 | | | | | | | | | | |
| | | 12 (8119208) | | | 4 | | | | | | | | | | |
| Fluoroscopy fistulography anus | Usually not appropriate | Limited | ≎≎≎ 1-10 mSv | | 3 | 3 | 1 | 5 | 3 | 3 | 3 | 1 | 1 | 0 | 0 |
| | | References | | Stud | y Quality | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

| | | 14 (25469082) | | | 4 | | | | | | | | | | |
|----------------------------|------------------|---------------------|-----------------|----------------------------|---|---|----|---|---|---|---|---|---|---|---|
| | | 15 (27034072) | | | 4 | | | | | | | | | | |
| | | 13 (1993416) | | | 4 | | | | | | | | | | |
| | _ | 16 (3971802) | | | 4 | | | _ | | | | | | | |
| Fluoroscopy contrast enema | Usuall approp | Expert Consensus | ��� 1-10 mSv | ���� 3- 10 mSv [ped] | 2 | 2 | 7 | 6 | 1 | 1 | 1 | 1 | 0 | 0 | 0 |
| Radiography pelvis | Usuall approp | Expert Consensus | �� 0.1-1mS | | 1 | 1 | 12 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |

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

| D 1 | Appropriat | teness | COF | 4 1 14 DD | · T | D I DDI | D 41 | 3.6.11 | | | F | inal | Tabu | latio | ns | | |
|---|----------------------|----------|---------------|-----------------|-----|----------------------------|---------|--------|---|---|---|------|------|-------|----|---|---|
| Procedure | Catego | | SOE | Adults RR | L | Peds RRL | Rating | Median | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| CT pelvis with IV contrast | Usually appropria | | Limited | ��� 1-10 mSv | 0 | ���� 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 appropri | | Limited | O 0 mSv | ′ | O 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 appropria | e ate | Limited | ��� 1-10 mSv | 0 | ���� 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 | | | | | | | | | | |

| May be appropriate | Limited | ��� 1-10 mSv | | 6 | 6 | 0 | 0 | 0 | 0 | 5 | 6 | 3 | 0 | 0 |
|-------------------------|--|---------------------------|----------------------------|--------------------|----------------------------|--------------------------------|--------------------------------|--|--------------------------------|--------------------------------|--|--|--|--|
| | References | | Study | Quality | | | | | | | | | | |
| | 39 (9248120) | | | 4 | | | | | | | | | | |
| 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 | | | | | | | | | | |
| May be appropriate | Limited | O 0 mSv | O 0 mSv [ped] | 5 | 5 | 0 | 0 | 1 | 1 | 7 | 5 | 0 | 0 | 0 |
| | References | | Study | Quality | | • | | | | | | | | |
| | 43 (11856710) | | | 4 | | | | | | | | | | |
| May be appropriate | Limited | O 0 mSv | O 0 mSv [ped] | 5 | 5 | 1 | 0 | 0 | 1 | 7 | 5 | 0 | 0 | 0 |
| | References | | Study | Quality | | | | | | | | | | |
| | 45 (27053063) | | | 4 | | | | | | | | | | |
| | 44 (10458131) | | | 3 | | | | | | | | | | |
| 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 | | | | | | | | | | |
| 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) | | | | | | | | | | | | | |
| | May be appropriate May be appropriate May be appropriate Usually not appropriate Usually not | References 39 (9248120) | References 39 (9248120) | References Study | References Study Quality | References Study Quality A | References Study Quality A | References Study Quality Study Quality | References Study Quality A | References Study Quality A | References Study Quality A A A A A A A A A | References Study Quality Study Quality | References Study Quality Study Quality | References Study Quality Study Quality |

| Radiography pelvis | Usually not appropriate | Expert Consensus | �� 0.1-1mSv | �� 0.03- 0.3 mSv [ped] | 1 | 1 | 11 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | |
|--------------------|-------------------------|---------------------|-------------|------------------------------|---|---|----|---|---|---|---|---|---|---|---|--|
|--------------------|-------------------------|---------------------|-------------|------------------------------|---|---|----|---|---|---|---|---|---|---|---|--|

Variant 3: Suspected proctitis or pouchitis. Initial imaging.

| | Appropria | teness | 207 | | | | | | | | F | inal | Tabu | latio | ns | | |
|---|--------------------|-----------------------------|---------------------|-----------------|----|----------------------------|---------|--------|---|---|---|------|------|-------|----|---|---|
| Procedure | Catego | ry | SOE | Adults RR | RL | Peds RRL | Rating | Median | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| CT pelvis with IV contrast | Usuall appropri | | Expert Consensus | ��� 1-10 mSv | 0 | ���� 3- 10 mSv [ped] | 8 | 8 | 0 | 0 | 0 | 1 | 0 | 1 | 5 | 7 | 3 |
| MRI pelvis without and with IV contrast | Usuall appropri | | Limited | O 0 mSv | ′ | O 0 mSv [ped] | 8 | 8 | 0 | 0 | 0 | 1 | 0 | 1 | 3 | 4 | 8 |
| | | | References | | | Study | Quality | | | | | | | | | | |
| | | | 19 (25038854) | | | | 3 | | | | | | | | | | |
| | | | 55 (16985109) | | | | 4 | | | | | | | | | | |
| | | | 18 (28218881) | | | | 4 | | | | | | | | | | |
| | | | 54 (27315072) | | | | 3 | | | | | | | | | | |
| | | | 17 (9606374) | | | | 4 | | | | | | | | | | |
| CT enterography | Usuall appropri | | Limited | ���� 10- mSv | 30 | ���� 3- 10 mSv [ped] | 7 | 7 | 0 | 0 | 1 | 0 | 0 | 4 | 4 | 8 | 0 |
| | | • | References | | | | Quality | | • | | | | • | | • | | |
| | | | 48 (22805666) | | | _ | 3 | | | | | | | | | | |
| MR enterography | Usuall appropri | | Limited | O 0 mSv | / | O 0 mSv [ped] | 7 | 7 | 1 | 0 | 0 | 1 | 1 | 3 | 5 | 5 | 1 |
| | | | References | | | Study | Quality | | | | | | | | | | |
| | | | 53 (26496569) | | | _ | 3 | | | | | | | | | | |
| MRI pelvis without IV contrast | May b appropri | e ate | Limited | O 0 mSv | ′ | O 0 mSv [ped] | 5 | 5 | 0 | 0 | 3 | 3 | 5 | 3 | 0 | 0 | 0 |
| | | | References | | | Study | Quality | | | | | | | | | | |
| | | References 19 (25038854) | | | | | 3 | | | | | | | | | | |

| | | 55 (16985109) | | | | 4 | | | | | | | | | | |
|--|-------------------|---------------------|-----------------|-----|------------------------------|---------|---|----|---|---|---|---|---|---|---|---|
| | | 18 (28218881) | | | | 4 | | | | | | | | | | |
| | | 54 (27315072) | | | | 3 | | | | | | | | | | |
| | | 17 (9606374) | | | | 4 | | | | | | | | | | |
| Fluoroscopy contrast enema | May approp | Limited | ��� 1-10 mSv | 0 | ���� 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 approp | Expert Consensus | ��� 1-10 mSv | 0 | ���� 3- 10 mSv [ped] | 3 | 3 | 0 | 2 | 8 | 3 | 1 | 0 | 0 | 0 | 0 |
| CT pelvis without and with IV contrast | Usually approp | Expert Consensus | ���� 10- mSv | 30 | ତତତତ 3- 10 mSv [ped] | 3 | 3 | 0 | 3 | 8 | 2 | 0 | 0 | 1 | 0 | 0 |
| FDG-PET/CT skull base to mid-thigh | Usually approp | Limited | ���� 10- mSv | 30 | ���� 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 approp | Limited | O 0 mSv | / | O 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 approp | Limited | ���� 10- mSv | 30 | | 3 | 3 | 5 | 1 | 6 | 3 | 1 | 0 | 1 | 0 | 0 |
| | | References | | | Study | Quality | | | • | • | | • | | • | | |
| | | 57 (2104730) | | | | 4 | | | | | | | | | | |
| Radiography pelvis | Usually approp | Expert Consensus | �� 0.1-1m | ıSv | �� 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.

| . | Appropriateness | COF | 4 1 1/ PPI | D 1 DD1 | D (1 | 3.7.19 | | | F | inal | Tabu | latio | ns | | |
|---|---------------------|---------------|-----------------|----------------------------|---------|--------|---|---|---|------|------|-------|----|---|---|
| Procedure | Category | SOE | Adults RRL | Peds RRL | Rating | Median | 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 | O 0 mSv | O 0 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 l | | Limited | ��� 1-10 mSv | 0 | ���� 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 l | | Limited | ��� 1-10 mSv | 0 | ଡେଡେଡ 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 l | | Limited | O 0 mSv | , | O 0 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 appropr | | Limited | ≎≎≎≎ 10∹ mSv | 30 | ����� 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 | | Limited | ���� 10∹ mSv | 30 | ���� 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 | ୫୫୫ 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 | O 0 mSv | O 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.