American College of Radiology ACR Appropriateness Criteria[®]

Staging and Follow-up of Anal Cancer

Variant 1: Adult. Newly diagnosed squamous cell anal cancer. Locoregional assessment at initial staging.

Procedure	Appropriateness Category	SOE	Adults RR	L Peds	RRL	Rating	Median	1				Tabu			0	0
MRI pelvis without and with IV contrast	Usually appropriate	Limited	O 0 mSv		mSv ed]	7	7	0	2 0	3	4 0	5	6	11	8 0	9
		References			Study	Quality										
		18 (19365694)				3										
		19 (36932225)				4										
FDG-PET/CT skull base to mid- thigh	Usually appropriate	Strong	֎֎֎֎ 10-3 mSv	⁵⁰ 10 m	9œ 3- mSv ed]	7	7	0	0	1	0	0	2	5	5	2
		References			Study Quality											
		16 (24672298)		Good												
		13 (25652048)														
		14 (28972796)		Good												
		15 (29759568)		Good												
		17 (37592085)			0	Good			-				-			
MRI pelvis without IV contrast	May be appropriate	Limited	O 0 mSv		mSv ed]	6	6	0	0	1	2	3	3	4	2	0
		References			Study	Quality										
		21 (32540336)			3											
		23 (28874205)				3										
		22 (29134349)				3										
		20 (22294527)				3										

			19 (36932225)		4											
CT pelvis with IV contrast	May approp		iate		&&&& 3- 10 mSv [ped]	5	5	0	0	0	2	9	1	3	0	0
			References		Study	Quality										
			12 (22592047)													
			13 (25652048)	G												
		11 (20832181)														
			14 (28972796)	G												
FDG-PET/MRI whole body	May approp				⊕⊕⊕⊕ 3- 10 mSv [ped]	5	5	1	0	1	4	7	1	1	0	0
US pelvis transrectal	Usuall approp		Limited	O 0 mSv	O 0 mSv [ped]	3	3	2	5	5	1	2	0	0	0	0
			References		Study	Quality										
			18 (19365694)			3										
			24 (28152518)			3										
			19 (36932225)			4										
CT pelvis without IV contrast	Usuall approp		Expert Consensus	ତତତ 1-10 mSv	&&& 3- 10 mSv [ped]	2	2	6	3	3	1	1	0	0	1	0
CT pelvis without and with IV contrast	Usuall approp		Expert Consensus	ବତତତ 10-30 mSv)	2	2	5	4	4	1	0	0	1	0	0

Variant 2: Adult. Squamous cell anal cancer. Assessment for metastatic disease at initial staging or surveillance.

Procedure	Appropriateness	ness		Dodg DDI	Deting		Final Tabulations						ns		
	Category		Adults RRL	Peds RRL	Rating	Median	1	2	3	4	5	6	7	8	9
CT abdomen and pelvis with IV contrast	Usually appropriate	e Moderate	Moderate SSS 1-10 mSv		8	8	0	0	0	0	1	1	1	6	6
		References		Study	v Quality										

			13 (25652048)			Good										
			10 (31753232)			4										
CT chest with IV contrast	Usually appropriat		Limited	ତତତ 1-10 mSv	ତତତତ 3- 10 mSv [ped]	7	7	1	0	0	0	1	1	5	5	2
			References		Stud	ly Quality										
			10 (31753232)			4										
CT chest without IV contrast	Usually appropriat		Limited	ତତତ 1-10 mSv	ଡେଡେଡ 3- 10 mSv [ped]	7	7	0	0	1	1	3	1	6	3	0
		References			Stud											
		10 (31753232)					_	-			-					
FDG-PET/CT skull base to mid- thigh	Usually appropriat		Strong	ତତତତ 10-3 mSv	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	7	7	0	0	1	0	0	2	5	7	0
		References			Stud	ly Quality										
			13 (25652048)			Good										
			14 (28972796)		Good 3											
		,	26 (22208962)													
[17 (37592085)		Good											
MRI abdomen and pelvis without and with IV contrast	May be appropriat	te	Limited	O 0 mSv	O 0 mSv [ped]	5	5	0	0	0	0	8	6	1	0	0
			References		Stud	ly Quality										
			27 (33153555)			4										
CT abdomen and pelvis without IV contrast	May be appropriat		Moderate	ତତତ 1-10 mSv	֎֎֎֎ 3- 10 mSv [ped]	4	4	2	1	3	4	3	2	0	0	0
			References		Stud	ly Quality										
			13 (25652048)			Good										
CT abdomen and pelvis without and with IV contrast	Usually no appropriat		Moderate	ବ୍ତବ୍ରବ୍ର 10-3 mSv	0 0 000000000000000000000000000000000	3	3	2	5	7	1	0	0	0	0	0
			References		Stud	ly Quality										

		13 (25652048)		Good												
MRI abdomen and pelvis without IV contrast	Usuall approp		Limited	O 0 mSv	O 0 mSv [ped]	3	3	0	2	8	4	1	0	0	0	0
			References		Study Quality											
			27 (33153555)		4							_				
FDG-PET/MRI whole body	Usuall approp		Expert Consensus	ତେତେ 1-1(mSv)	3	3	4	0	5	0	4	1	1	0	0
CT chest without and with IV contrast	Usuall approp	y not oriate	not ate Limited $\mathfrak{S}\mathfrak{S}\mathfrak{S}$ 1-10 mSv)	2	2	2	11	2	0	0	0	0	0	0
			References		Study Quality					-		-				
			10 (31753232)			4										

Variant 3: Adult. Squamous cell anal cancer. Posttreatment locoregional assessment.

	Appropri	iateness	COL				D (1			Final Tabulations									
Procedure	Categ	gory	SOE	Adults RR	KL .	Peds RRL	Rating	Median	1	2	3	4	5	6	7	8	9		
MRI pelvis without and with IV contrast	Usua approp		Limited	O 0 mSv	/	O 0 mSv [ped]	7	7	0	0	1	1	1	3	5	4	0		
			References			Study	v Quality												
			24 (28152518)				3				_								
FDG-PET/CT skull base to mid- thigh	Usua approp		Strong		-30	ତତତତ 3- 10 mSv [ped]	7	7	0	0	1	0	1	1	7	4	1		
			References			Study	v Quality												
			13 (25652048)			C	Good												
			28 (33539412)				3												
			29 (35274187)				4												
			14 (28972796)			C	bood												
			17 (37592085)			C	Good												

CT pelvis with IV contrast	May be appropriate	Expert Consensus	ଡଡଡ 1-10 mSv	&&&& 3- 10 mSv [ped]	5	5	0	0	0	7	7	1	0	0	0
MRI pelvis without IV contrast	May be appropriate	Limited	O 0 mSv	O 0 mSv [ped]	5	5	0	0	0	2	7	6	0	0	0
		References		Study	y Quality										
		29 (35274187)													
		30 (27090113)			3										
		24 (28152518)			3										
		19 (36932225)			4										
		31 (37462820)			3										
FDG-PET/MRI whole body	May be appropriate	Expert Consensus	ଝେଝେ 1-10 mSv	⊕⊕⊕⊕ 3- 10 mSv [ped]	5	5	0	1	6	0	8	0	0	0	0
CT pelvis without IV contrast	Usually not appropriate	Expert Consensus	ତତତ 1-10 mSv	€€€€ 3- 10 mSv [ped]	3	3	2	5	4	3	1	0	0	0	0
US pelvis transrectal	Usually not appropriate	Limited	O 0 mSv	O 0 mSv [ped]	3	3	3	1	7	1	2	1	0	0	0
		References		Study	y Quality										
		32 (25585077)			3										
		24 (28152518)			3										
CT pelvis without and with IV contrast	Usually not appropriate	Expert Consensus	ତତତତ 10-30 mSv) 🛛 🕸 🏵 🏵 🛠 3- 10 mSv [ped]	2	2	6	3	3	0	1	1	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.