

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

Female Infertility

Variant 1: Female infertility. Evaluation of ovulatory function and ovarian reserve. Initial Imaging.

Procedure	Appropriateness Category	SOE	Adults RRL	Peds RRL	Rating	Median	Final Tabulations								
							1	2	3	4	5	6	7	8	9
US pelvis transvaginal	Usually appropriate	Limited	O 0 mSv	O 0 mSv [ped]	9	9	0	0	0	0	0	0	0	2	13
		References		Study Quality											
		27 (7211967)		4											
		28 (15705365)		M											
		29 (10389718)		3											
US pelvis transabdominal	Usually appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	7	7	0	0	0	0	1	6	7	0	0
MRI pelvis without IV contrast	May be appropriate	Limited	O 0 mSv	O 0 mSv [ped]	6	6	1	0	0	1	2	10	0	0	0
		References		Study Quality											
		26 (23292744)		3											
		25 (24661732)		4											
MRI pelvis without and with IV contrast	Usually not appropriate	Limited	O 0 mSv	O 0 mSv [ped]	3	3	3	1	7	0	2	1	1	0	0
		References		Study Quality											
		26 (23292744)		3											
		25 (24661732)		4											

Variant 2: Female infertility. Clinical features or history of polycystic ovary syndrome. Initial Imaging.

Procedure	Appropriateness Category	SOE	Adults RRL	Peds RRL	Rating	Median	Final Tabulations								
							1	2	3	4	5	6	7	8	9
US pelvis transvaginal	Usually appropriate	Limited	O 0 mSv	O 0 mSv [ped]	9	9	0	0	0	0	0	1	0	1	13
		References		Study Quality											
		32 (1561343)		3											
		5 (24345633)		4											
MRI pelvis without IV contrast	May be appropriate	Limited	O 0 mSv	O 0 mSv [ped]	6	6	0	0	1	0	3	10	0	0	0
		References		Study Quality											
		26 (23292744)		3											
		25 (24661732)		4											
		30 (28742467)		3											
US pelvis transabdominal	May be appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	6	6	0	0	1	0	2	8	3	0	0
US color Doppler pelvis	May be appropriate	Limited	O 0 mSv	O 0 mSv [ped]	4	4	0	4	1	5	2	1	0	0	1
		References		Study Quality											
		31 (8567828)		3											
MRI pelvis without and with IV contrast	Usually not appropriate	Limited	O 0 mSv	O 0 mSv [ped]	3	3	3	1	7	0	2	1	0	1	0
		References		Study Quality											
		26 (23292744)		3											
		25 (24661732)		4											
		30 (28742467)		3											

Variant 3: Female infertility. History or clinical suspicion of endometriosis. Initial Imaging.

Procedure	Appropriateness Category	SOE	Adults RRL	Peds RRL	Rating	Median	Final Tabulations								
							1	2	3	4	5	6	7	8	9
US pelvis transvaginal	Usually appropriate	Strong	O 0 mSv	O 0 mSv [ped]	9	9	0	0	0	0	0	0	0	4	11
		References		Study Quality											
		47 (9491875)		3											
		49 (25715375)		3											
		50 (22034232)		2											
		51 (20954166)		M											
		46 (25597884)		3											
		48 (29465552)		3											
MRI pelvis without IV contrast	Usually appropriate	Strong	O 0 mSv	O 0 mSv [ped]	8	8	0	0	1	0	0	2	1	8	2
		References		Study Quality											
		34 (14615553)		4											
		36 (8327693)		2											
		40 (23169738)		2											
		35 (2052726)		3											
		41 (15665220)		2											
		37 (24475842)		3											
		38 (29193230)		3											
		39 (15205479)		3											
US pelvis transabdominal	Usually appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	7	7	0	0	0	0	4	2	6	2	1
US pelvis transrectal	Usually appropriate	Limited	O 0 mSv	O 0 mSv [ped]	7	7	0	0	0	1	3	2	4	2	3
		References		Study Quality											
		44 (1824581)		3											
		43 (15162229)		4											
		45 (24910933)		4											

US color Doppler pelvis	May be appropriate	Limited	O 0 mSv	O 0 mSv [ped]	6	6	1	0	0	1	1	5	2	4	1
		References	Study Quality												
		43 (15162229)	4												
		42 (27054310)	4												
MRI pelvis without and with IV contrast	May be appropriate (Disagreement)	Expert Opinion	O 0 mSv	O 0 mSv [ped]	5	5	0	0	2	0	3	1	6	1	1
		References	Study Quality												
		34 (14615553)	4												
		36 (8327693)	2												
		40 (23169738)	2												
		35 (2052726)	3												
		41 (15665220)	2												
		37 (24475842)	3												
		38 (29193230)	3												
		39 (15205479)	3												
Fluoroscopy hysterosalpingography	May be appropriate	Limited	☼☼ 0.1-1mSv		5	5	0	1	4	2	6	1	0	0	0
		References	Study Quality												
		8 (22031261)	4												
		33 (1834842)	3												
US sonohysterography with tubal contrast agent	May be appropriate (Disagreement)	Expert Opinion	O 0 mSv	O 0 mSv [ped]	5	5	1	3	1	0	5	3	1	0	0
		References	Study Quality												
		53 (10207476)	2												
		55 (17636730)	4												
		42 (27054310)	4												
		54 (30244483)	3												
US sonohysterography	Usually not appropriate	Limited	O 0 mSv	O 0 mSv [ped]	3	3	3	4	5	0	0	2	0	0	0

References	Study Quality
52 (17947378)	3

Variant 4: Female infertility. Suspicion of tubal occlusion. Initial Imaging.

Procedure	Appropriateness Category	SOE	Adults RRL	Peds RRL	Rating	Median	Final Tabulations								
							1	2	3	4	5	6	7	8	9
Fluoroscopy hysterosalpingography	Usually appropriate	Limited	☼☼ 0.1-1mSv		8	8	0	0	0	1	1	0	2	5	6

References	Study Quality
58 (9885610)	1
56 ()	4
11 (16549607)	4
57 (7641899)	M

US sonohysterography with tubal contrast agent	Usually appropriate	Strong	0 0 mSv	0 0 mSv [ped]	8	8	0	0	1	0	1	2	3	1	7
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References	Study Quality
65 (19685552)	3
53 (10207476)	2
55 (17636730)	4
66 (1584936)	2
42 (27054310)	4
54 (30244483)	3

US pelvis transvaginal	Usually appropriate	Limited	0 0 mSv	0 0 mSv [ped]	7	7	0	0	0	1	0	1	7	1	4
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References	Study Quality
64 (17625419)	4
63 (-3127398)	4
62 (27753111)	3

		75 (11476785)		2											
		76 (20101638)		3											
MRI pelvis without and with IV contrast	Usually appropriate	Limited	0 0 mSv	0 0 mSv [ped]	8	8	0	0	1	0	3	0	3	6	2
		References		Study Quality											
		72 (23065174)		4											
		74 (7867273)		4											
		67 (18161399)		3											
		73 (10632403)		4											
		75 (11476785)		2											
		76 (20101638)		3											
US sonohysterography	Usually appropriate	Limited	0 0 mSv	0 0 mSv [ped]	8	8	0	0	0	0	1	3	1	4	6
		References		Study Quality											
		71 (15653584)		4											
		83 (11728660)		3											
		87 (18314520)		4											
		85 (23269704)		4											
		86 (20970387)		3											
		76 (20101638)		3											
		52 (17947378)		3											
US pelvis transvaginal	Usually appropriate	Limited	0 0 mSv	0 0 mSv [ped]	8	8	0	0	0	1	0	0	3	4	7
		References		Study Quality											
		74 (7867273)		4											
		79 (22643500)		3											
		84 (20052665)		3											
		83 (11728660)		3											
		67 (18161399)		3											
		68 (10064410)		3											
		69 (15505312)		3											

[illegible]

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.