

American College of Radiology
ACR Appropriateness Criteria®

Pancreatic Cyst

Variant 1: Incidentally detected pancreatic cyst less than or equal to 2.5 cm in size. Initial evaluation.

Procedure	Appropriateness Category	SOE	Adults RRL	Peds RRL	Rating	Median	Final Tabulations								
							1	2	3	4	5	6	7	8	9
MRI abdomen without and with IV contrast with MRCP	Usually appropriate	Strong	O 0 mSv	O 0 mSv [ped]	9	9	0	0	0	0	0	0	0	4	11
		References		Study Quality											
		23 (26811661)		4											
		6 (24690615)		4											
		3 (22534872)		4											
		7 (28533111)		4											
		10 (16327281)		4											
		8 (22687371)		4											
		9 (25805375)		4											
		22 (19696285)		2											
		18 (17659551)		2											
		24 (21356393)		2											
MRI abdomen without IV contrast with MRCP	May be appropriate	Strong	O 0 mSv	O 0 mSv [ped]	6	6	0	0	1	0	2	5	2	4	1
		References		Study Quality											
		23 (26811661)		4											
		6 (24690615)		4											
		3 (22534872)		4											
		7 (28533111)		4											

10 (16327281)	4
8 (22687371)	4
9 (25805375)	4
15 (16436817)	2
19 (-3141673)	4
20 (24355035)	4
21 (22347959)	4
22 (19696285)	2
18 (17659551)	2

CT abdomen without and with IV contrast	Usually not appropriate	Strong	⊕⊕⊕⊕ 10-30 mSv	⊕⊕⊕⊕⊕ 10-30 mSv [ped]	3	3	3	5	7	2	0	0	0	0	0
---	-------------------------	--------	----------------	-----------------------	---	---	---	---	---	---	---	---	---	---	---

References	Study Quality
6 (24690615)	4
3 (22534872)	4
1 (22520033)	4
7 (28533111)	4
13 (28735806)	4
10 (16327281)	4
8 (22687371)	4
9 (25805375)	4
15 (16436817)	2
19 (-3141673)	4
20 (24355035)	4
21 (22347959)	4
22 (19696285)	2
18 (17659551)	2

US abdomen endoscopic	Usually not appropriate	Limited	○ 0 mSv	○ 0 mSv [ped]	3	3	3	4	4	0	2	2	0	0	0
-----------------------	-------------------------	---------	---------	---------------	---	---	---	---	---	---	---	---	---	---	---

References	Study Quality
25 (27523971)	4

26 (25798910)	3
6 (24690615)	4
27 (22744342)	3
17 (19767045)	3

Variant 2: Incidentally detected pancreatic cyst greater than 2.5 cm in size. No high-risk stigmata or worrisome features. Initial evaluation.

Procedure	Appropriateness Category	SOE	Adults RRL	Peds RRL	Rating	Median	Final Tabulations								
							1	2	3	4	5	6	7	8	9
MRI abdomen without and with IV contrast with MRCP	Usually appropriate	Strong	O 0 mSv	O 0 mSv [ped]	9	9	0	0	0	0	0	1	1	2	11
		References		Study Quality											
		23 (26811661)		4											
		6 (24690615)		4											
		3 (22534872)		4											
		7 (28533111)		4											
		10 (16327281)		4											
		8 (22687371)		4											
		9 (25805375)		4											
		18 (17659551)		2											
		24 (21356393)		2											
MRI abdomen without IV contrast with MRCP	May be appropriate	Strong	O 0 mSv	O 0 mSv [ped]	6	6	0	0	1	0	1	6	0	4	3
		References		Study Quality											
		23 (26811661)		4											
		6 (24690615)		4											
		3 (22534872)		4											
		7 (28533111)		4											
		10 (16327281)		4											
		8 (22687371)		4											

CT abdomen without IV contrast	Usually not appropriate	Strong	☼☼☼ 1-10 mSv	☼☼☼☼ 3-10 mSv [ped]	3	3	1	2	10	2	0	0	0	0	0
--------------------------------	-------------------------	--------	--------------	---------------------	---	---	---	---	----	---	---	---	---	---	---

References	Study Quality
6 (24690615)	4
3 (22534872)	4
1 (22520033)	4
7 (28533111)	4
13 (28735806)	4
10 (16327281)	4
8 (22687371)	4
9 (25805375)	4
15 (16436817)	2
19 (-3141673)	4
20 (24355035)	4
21 (22347959)	4
22 (19696285)	2
18 (17659551)	2

CT abdomen without and with IV contrast	Usually not appropriate	Strong	☼☼☼☼ 10-30 mSv	☼☼☼☼☼ 10-30 mSv [ped]	2	2	3	6	5	2	1	0	0	0	0
---	-------------------------	--------	----------------	-----------------------	---	---	---	---	---	---	---	---	---	---	---

References	Study Quality
6 (24690615)	4
3 (22534872)	4
1 (22520033)	4
7 (28533111)	4
13 (28735806)	4
10 (16327281)	4
8 (22687371)	4
9 (25805375)	4
15 (16436817)	2
19 (-3141673)	4

		9 (25805375)		4													
		22 (19696285)		2													
		24 (21356393)		2													
CT abdomen with IV contrast multiphase	May be appropriate	Limited	☼☼☼☼ 10-30 mSv		6	6	0	0	1	1	5	4	0	4	0		
		References		Study Quality													
		14 (27161060)		3													
		1 (22520033)		4													
		7 (28533111)		4													
		13 (28735806)		4													
		10 (16327281)		4													
		8 (22687371)		4													
		9 (25805375)		4													
		19 (-3141673)		4													
		20 (24355035)		4													
		21 (22347959)		4													
MRI abdomen without IV contrast with MRCP	May be appropriate	Strong	○ ○ mSv	○ ○ mSv [ped]	5	5	0	0	1	2	9	2	2	0	1		
		References		Study Quality													
		23 (26811661)		4													
		14 (27161060)		3													
		6 (24690615)		4													
		8 (22687371)		4													
		9 (25805375)		4													
		22 (19696285)		2													
		24 (21356393)		2													
CT abdomen without IV contrast	Usually not appropriate	Limited	☼☼☼ 1-10 mSv	☼☼☼☼ 3-10 mSv [ped]	3	3	3	4	6	2	0	0	0	0	0		
		References		Study Quality													
		14 (27161060)		3													
		1 (22520033)		4													

[illegible]

Variant 4: Incidentally detected main pancreatic duct dilation greater than 7 mm in size. Suspected main duct intraductal papillary mucinous neoplasm (IPMN). Initial evaluation.

Procedure	Appropriateness Category	SOE	Adults RRL	Peds RRL	Rating	Median	Final Tabulations								
							1	2	3	4	5	6	7	8	9
US abdomen endoscopic	Usually appropriate	Limited	0 0 mSv	0 0 mSv [ped]	9	9	0	0	1	0	0	0	0	3	11
		References		Study Quality											

MRI abdomen without and with IV contrast with MRCP	Usually appropriate	Limited	0 0 mSv	0 0 mSv [ped]	8	8	0	0	0	0	1	3	3	2	6
MRI abdomen without IV contrast with MRCP	Usually appropriate	Limited	0 0 mSv	0 0 mSv [ped]	7	7	0	1	0	0	1	3	10	1	1
CT abdomen with IV contrast multiphase	May be appropriate	Limited	☼☼☼☼ 10-30 mSv		5	5	0	0	0	4	5	3	3	0	0

		32 (23022726)		4													
		1 (22520033)		4													
		7 (28533111)		4													
		13 (28735806)		4													
		10 (16327281)		4													
		8 (22687371)		4													
		9 (25805375)		4													
		CT abdomen without and with IV contrast	Usually not appropriate	Limited	☼☼☼☼ 10-30 mSv												
		References		Study Quality													
		32 (23022726)		4													
		1 (22520033)		4													
		7 (28533111)		4													
		13 (28735806)		4													
		10 (16327281)		4													
		8 (22687371)		4													
		9 (25805375)		4													
CT abdomen without IV contrast	Usually not appropriate	Limited	☼☼☼ 1-10 mSv	☼☼☼☼ 3-10 mSv [ped]	2	2	4	4	5	2	0	0	0	0	0		
		References		Study Quality													
		32 (23022726)		4													
		1 (22520033)		4													
		7 (28533111)		4													
		13 (28735806)		4													
		10 (16327281)		4													
		8 (22687371)		4													
		9 (25805375)		4													

Variant 5: Follow-up imaging of pancreatic cyst.

CT abdomen without IV contrast	Usually not appropriate	Limited	☹☹☹ 1-10 mSv	☹☹☹☹ 3-10 mSv [ped]	3	3	4	1	6	2	1	1	0	0	0
		References		Study Quality											
		7 (28533111)		4											
		8 (22687371)		4											
		9 (25805375)		4											
CT abdomen without and with IV contrast	Usually not appropriate	Limited	☹☹☹☹ 10-30 mSv	☹☹☹☹☹ 10-30 mSv [ped]	3	3	3	5	9	0	0	0	0	0	0
		References		Study Quality											
		7 (28533111)		4											
		8 (22687371)		4											
		9 (25805375)		4											
US abdomen endoscopic	Usually not appropriate	Limited	○ ○ mSv	○ ○ mSv [ped]	3	3	2	2	9	0	2	0	0	0	0
		References		Study Quality											
		7 (28533111)		4											
		10 (16327281)		4											
		8 (22687371)		4											
		9 (25805375)		4											

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.