American College of Radiology ACR Appropriateness Criteria®

Lower Extremity Arterial Claudication-Imaging Assessment for Revascularization

Variant 1: Lower extremity arterial claudication-imaging assessment for revascularization. Initial imaging.

	Appropri	ateness	905		_	D 1 DD1	- ·	3.5.31			F	inal '	Tabu l	latior	ıs		
Procedure	Categ	Category SOE Adults RRL Peds RRL Rat		Rating	Median	1	2	3	4	5	6	7	8	9			
CTA abdomen and pelvis with bilateral lower extremity runoff with IV contrast	Usua approp		Strong	���� 10-3 mSv	30		8	8	0	1	0	0	0	1	0	8	4
			References			Study	Quality										
			21 (21345629)				2										
			23 (27399244)				4										
			15 (21658691)				2										
		22 (16966479)															
		18 (16580545)															
		10 (12591682)			2												
		19 (17848679)			M												
			20 (12601190)				1										
			13 (20609871)				4										
			17 (15128997)		2												
			16 (18094974)				2										
			14 (20233780)				4		_								
MRA abdomen and pelvis with bilateral lower extremity runoff with IV contrast	Usua approp		Strong	O 0 mSv	,	O 0 mSv [ped]	8	8	0	0	0	1	2	1	2	4	4
			References			Study	Quality										
		26 (23801421)			M												
			30 (22109304)				2										

28 (25241315) 4 31 (10887299) M 27 (12239057) 3 32 (16864668) 1																	
27 (12239057) 3 32 (16864668) 1			28 (25241315)														
32 (16864668) 1 25 (9052573) 4 3 3 3 4 3 5 5 (9052573) 3 4 3 5 5 (9052573) 3 4 3 5 5 (9052573) 3 5 5 (9052573) 3 5 (905257			31 (10887229)			M											
25 (9052573)			27 (12239057)	1			3										
CTA abdomen and pelvis with bilateral lower extremity runoff without and with IV contrast Usually appropriate References Study Quality 21 (21345629) 2 23 (27399244) 4 4			32 (16864668)	1			1										
CTA abdomen and pelvis with bilaterial lower extremity runoff without and with IV contrast Strong Strong			25 (9052573)				4										
Strong 100 mSv 8 8 0 0 0 0 1 1 4 9 1			29 (25079487)				3										
21 (21345629)	CTA abdomen and pelvis with bilateral lower extremity runoff without and with IV contrast	Usually appropriate	Strong				8	8	0	0	0	0	1	1	4	9	1
23 (27399244)			References		Study Quality												
15 (21658691) 2			21 (21345629))			2										
22 (16966479)			23 (27399244)														
18 (16580545) 2			` ´ ´														
10 (12591682) 2 19 (17848679) M			·			4											
19 (17848679) M 20 (12601190) 1 13 (20609871) 4 17 (15128997) 2 16 (18094974) 2 14 (20233780) 4 24 (17709077) 4						2											
20 (12601190) 1			· /			2											
13 (20609871)			19 (17848679))													
17 (15128997) 2 16 (18094974) 2 14 (20233780) 4			20 (12601190)	1	1												
16 (18094974) 2 14 (20233780) 4 24 (17709077) 4 Arteriography lower extremity Usually appropriate Limited № 0.1-1mSv 3 mSv 7 7 7 0 0 0 1 0 2 1 9 4 0 References Study Quality 10 (12591682) 2 2 (16545667) 4			13 (20609871)	1	4												
14 (20233780) 24 (17709077) 4 Arteriography lower extremity Usually appropriate Limited № 0.1-1mSv 3 mSv [ped] 7 7 0 0 1 0 2 1 9 4 0 References Study Quality 10 (12591682) 2 2 (16545667) 4			17 (15128997))													
Arteriography lower extremity Usually appropriate Limited & 0.1-1mSv 3 mSv 7 7 0 0 1 0 2 1 9 4 0			16 (18094974)	1													
Arteriography lower extremity Usually appropriate Limited © 0.1-1mSv 3 mSv 7 7 0 0 1 0 2 1 9 4 0 References Study Quality 10 (12591682) 2 (16545667) 4			14 (20233780))			4										
Contain Limited Contain Study Quality Contain Contain			24 (17709077)				4										
10 (12591682) 2 2 (16545667) 4	Arteriography lower extremity		Limited	�� 0.1-1m	ıSv	3 mSv	7	7	0	0	1	0	2	1	9	4	0
2 (16545667) 4			References		Study Quality												
			10 (12591682)			2											
12 (6359269)			2 (16545667)			4											
12 (0337207) T			12 (6359269)			4											
11 (18201915) 3			11 (18201915)				3										

US duplex Doppler lower extremity	Usually appropriate	Strong	O 0 mSv	O 0 mSv [ped]	7	7	1	0	0	0	1	2	8	0	2
		References		Study	Quality										
		21 (21345629)			2										
		40 (8796687)			M										
		31 (10887229)			M										
		37 (2931880)			3										
		38 (2196267)			2										
		39 (8445746)			4										
		41 (8164280)			2										
		32 (16864668)			1										
		42 (30342218)			2										
		43 (32240007)			4										
CTA lower extremity with IV contrast	May be appropriate	Strong	≎≎≎ 1-10 mSv	���� 3- 10 mSv [ped]	6	6	0	0	0	0	3	7	2	5	0
		References			Quality										
		21 (21345629)													
		23 (27399244)													
		15 (21658691)													
		22 (16966479)													
		18 (16580545)													
		10 (12591682)													
		19 (17848679)			M										
		20 (12601190)													
		13 (20609871)			4										
		17 (15128997)		2											
		16 (18094974)			2										
MRA lower extremity without IV contrast	May be appropriate	Moderate	O 0 mSv	O 0 mSv [ped]	6	6	0	0	0	1	7	8	1	0	0
		References			Study Quality										
		30 (22109304)		2											

		36 (21098208)			4										
		33 (22173999)			4										
		35 (21274982)			4										
		29 (25079487)			3										
MRA lower extremity without and with IV contrast	May be appropriate	Strong	O 0 mSv	O 0 mSv [ped]	6	6	0	0	0	0	4	8	4	1	0
		References		Study	Quality										
		26 (23801421)			M										
		30 (22109304)			2										
		28 (25241315)													
		31 (10887229)													
		27 (12239057)													
		36 (21098208)													
	32 (16864668) 25 (9052573)				1										
					4										
	33 (22173999)														
		35 (21274982)													
		29 (25079487)			3										
MRA abdomen and pelvis with bilateral lower extremity runoff without IV contrast	May be appropriate	Moderate	O 0 mSv	O 0 mSv [ped]	6	6	0	1	0	3	2	5	3	0	0
		References		Study											
		30 (22109304)													
		36 (21098208)													
33 (4										
		35 (21274982)			4										
		29 (25079487)			3										
CTA lower extremity without and with IV contrast	May be appropriate	Strong	≎≎≎ 1-10 mSv		6	6	0	0	0	0	1	10	2	2	1
		References		Study	Quality										
	21 (21345629)				2										
		21 (21343029)			2										

15 (21658691)	2
22 (16966479)	4
18 (16580545)	2
10 (12591682)	2
19 (17848679)	M
20 (12601190)	1
13 (20609871)	4
17 (15128997)	2
16 (18094974)	2
24 (17709077)	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.