

			42 (14077981)		4													
X-ray myelography cervical spine	Usually not appropriate	Limited	☼☼☼ 1-10 mSv		3	3	7	2	2	3	2	1	1	0	0			
		References			Study Quality													
			17 (-3130497)		4													
MRI cervical spine without and with IV contrast	Usually not appropriate	Strong	○ 0 mSv	○ 0 mSv [ped]	3	3	5	3	4	1	3	2	0	0	0			
		References			Study Quality													
			40 (2398088)		3													
			33 (21047885)		2													
			39 (17204882)		4													
			41 (27318668)		3													
			21 (8107998)		3													
			23 (9460946)		2													
			35 (2847516)		4													
CT myelography cervical spine	Usually not appropriate	Strong	☼☼☼☼ 10-30 mSv	☼☼☼ 0.3-3 mSv [ped]	2	2	7	3	3	4	1	0	1	0	0			
		References			Study Quality													
			37 (3823440)		2													
			38 (9534693)		2													
CTA neck with IV contrast	Usually not appropriate	Expert Consensus	☼☼☼ 1-10 mSv	☼☼☼ 0.3-3 mSv [ped]	1	1	10	4	2	1	1	0	0	0	0			
CT cervical spine with IV contrast	Usually not appropriate	Limited	☼☼☼ 1-10 mSv	☼☼☼☼ 3-10 mSv [ped]	1	1	10	1	5	1	1	0	0	0	0			
		References			Study Quality													
			35 (2847516)		4													
			36 (16632616)		2													
CT cervical spine without and with IV contrast	Usually not appropriate	Limited	☼☼☼ 1-10 mSv	☼☼☼☼ 3-10 mSv [ped]	1	1	12	2	2	2	0	0	0	0	0			

References	Study Quality
35 (2847516)	4
36 (16632616)	2

Discography cervical spine	Usually not appropriate	Expert Consensus	⊕⊕ 0.1-1mSv		1	1	12	3	3	0	0	0	0	0	0
Facet injection/medial branch block cervical spine	Usually not appropriate	Expert Consensus	⊕⊕ 0.1-1mSv		1	1	15	2	1	0	0	0	0	0	0
MRA neck without IV contrast	Usually not appropriate	Expert Consensus	○ 0 mSv	○ 0 mSv [ped]	1	1	12	1	4	0	1	0	0	0	0
MRA neck with IV contrast	Usually not appropriate	Expert Consensus	○ 0 mSv	○ 0 mSv [ped]	1	1	12	1	4	0	1	0	0	0	0
MRI cervical spine with IV contrast	Usually not appropriate	Strong	○ 0 mSv	○ 0 mSv [ped]	1	1	11	1	0	4	1	0	1	0	0

References	Study Quality
40 (2398088)	3
33 (21047885)	2
39 (17204882)	4
41 (27318668)	3
21 (8107998)	3
23 (9460946)	2
35 (2847516)	4

Bone scan whole body with SPECT or SPECT/CT neck	Usually not appropriate	Expert Consensus	⊕⊕⊕ 1-10 mSv	⊕⊕⊕⊕ 3-10 mSv [ped]	1	1	14	1	2	0	1	0	0	0	0
--	-------------------------	------------------	--------------	---------------------	---	---	----	---	---	---	---	---	---	---	---

Variant 3: Prior cervical spine surgery. New or increasing nontraumatic cervical or neck pain or radiculopathy. Initial imaging.

Procedure	Appropriateness Category	SOE	Adults RRL	Peds RRL	Rating	Median	Final Tabulations								
							1	2	3	4	5	6	7	8	9
Radiography cervical spine	Usually appropriate	Limited	⊕⊕ 0.1-1mSv	⊕⊕ 0.03-0.3 mSv	8	8	1	0	1	0	0	2	2	4	8

Procedure	Appropriateness Category	SOE	Adults RRL	Peds RRL	Rating	Median	Final Tabulations												
							1	2	3	4	5	6	7	8	9				
				[ped]															
		References		Study Quality															
		63 (21178831)		3															
		65 (19096562)		4															
		66 (23578991)		3															
		60 (23242622)		2															
		61 (19665192)		4															
		64 (18628706)		4															
		62 (24183750)		4															
CT cervical spine without IV contrast	Usually appropriate	Strong	☼☼☼ 1-10 mSv	☼☼☼☼☼ 3-10 mSv [ped]	7	7	1	0	1	0	1	1	6	5	3				
		References		Study Quality															
		52 (23479714)		4															
		51 (23318108)		Not Assessed															
		50 (23118135)		4															
		48 (18469691)		2															
		49 (16889148)		2															
		53 (26430596)		3															
MRI cervical spine without IV contrast	May be appropriate (Disagreement)	Expert Opinion	○ 0 mSv	○ 0 mSv [ped]	5	5	2	0	1	1	1	1	6	4	3				
		References		Study Quality															
		22 (26571180)		3															
		23 (9460946)		2															
		54 (-3127628)		4															
		55 (11371319)		4															
MRI cervical spine without and with IV contrast	May be appropriate (Disagreement)	Expert Opinion	○ 0 mSv	○ 0 mSv [ped]	5	5	0	0	2	4	9	1	2	0	1				

References	Study Quality
22 (26571180)	3
23 (9460946)	2
54 (-3127628)	4
57 (2119123)	4
56 (2966418)	2
55 (11371319)	4

CT myelography cervical spine	May be appropriate	Limited	⊕⊕⊕⊕ 10-30 mSv	⊕⊕⊕ 0.3-3 mSv [ped]	4	4	6	1	2	8	1	1	0	0	0
-------------------------------	--------------------	---------	----------------	---------------------	---	---	---	---	---	---	---	---	---	---	---

References	Study Quality
37 (3823440)	2

X-ray myelography cervical spine	Usually not appropriate	Limited	⊕⊕⊕ 1-10 mSv		3	3	6	1	5	4	2	0	0	0	0
----------------------------------	-------------------------	---------	--------------	--	---	---	---	---	---	---	---	---	---	---	---

References	Study Quality
17 (-3130497)	4

CT cervical spine with IV contrast	Usually not appropriate	Strong	⊕⊕⊕ 1-10 mSv	⊕⊕⊕⊕ 3-10 mSv [ped]	2	2	9	1	3	2	1	1	1	0	0
------------------------------------	-------------------------	--------	--------------	---------------------	---	---	---	---	---	---	---	---	---	---	---

References	Study Quality
52 (23479714)	4
51 (23318108)	Not Assessed
50 (23118135)	4
48 (18469691)	2
49 (16889148)	2
53 (26430596)	3

MRI cervical spine with IV contrast	Usually not appropriate	Strong	0 0 mSv	0 0 mSv [ped]	2	2	7	4	3	1	1	1	1	0	0
-------------------------------------	-------------------------	--------	---------	---------------	---	---	---	---	---	---	---	---	---	---	---

References	Study Quality
22 (26571180)	3
23 (9460946)	2
54 (-3127628)	4

57 (2119123)	4
56 (2966418)	2
55 (11371319)	4

CTA neck with IV contrast	Usually not appropriate	Expert Consensus	☹☹☹ 1-10 mSv	☹☹☹ 0.3-3 mSv [ped]	1	1	11	3	2	1	1	0	0	0	0
CT cervical spine without and with IV contrast	Usually not appropriate	Strong	☹☹☹ 1-10 mSv	☹☹☹☹ 3-10 mSv [ped]	1	1	11	2	1	1	1	0	1	1	0

References	Study Quality
52 (23479714)	4
51 (23318108)	Not Assessed
50 (23118135)	4
48 (18469691)	2
49 (16889148)	2
53 (26430596)	3

Discography cervical spine	Usually not appropriate	Expert Consensus	☹☹ 0.1-1mSv		1	1	12	4	1	1	0	0	0	0	0
Facet injection/medial branch block cervical spine	Usually not appropriate	Expert Consensus	☹☹ 0.1-1mSv		1	1	14	3	1	0	0	0	0	0	0
MRA neck without IV contrast	Usually not appropriate	Expert Consensus	○ 0 mSv	○ 0 mSv [ped]	1	1	11	1	5	0	1	0	0	0	0
MRA neck with IV contrast	Usually not appropriate	Expert Consensus	○ 0 mSv	○ 0 mSv [ped]	1	1	11	2	4	1	0	0	0	0	0
Bone scan whole body with SPECT or SPECT/CT neck	Usually not appropriate	Limited	☹☹☹ 1-10 mSv	☹☹☹☹ 3-10 mSv [ped]	1	n/a	0	0	0	0	0	0	0	0	0

References	Study Quality
58 (11037993)	1
59 (9171175)	3

Bone scan whole body with SPECT or SPECT/CT neck	Usually not appropriate	Limited	☹☹☹ 1-10 mSv	☹☹☹☹ 3-10 mSv [ped]	1	1	10	1	4	1	2	0	0	0	0
--	-------------------------	---------	--------------	---------------------	---	---	----	---	---	---	---	---	---	---	---

78 (11199429)	2
79 (15776239)	3
80 (12594568)	4

CT cervical spine without IV contrast	May be appropriate (Disagreement)	Expert Opinion	☼☼☼ 1-10 mSv	☼☼☼☼ 3-10 mSv [ped]	5	5	1	0	2	5	3	3	4	1	0
---------------------------------------	-----------------------------------	----------------	--------------	---------------------	---	---	---	---	---	---	---	---	---	---	---

References	Study Quality
69 (25952173)	4
70 (22677300)	4

Radiography cervical spine	May be appropriate (Disagreement)	Expert Opinion	☼☼ 0.1-1mSv	☼☼ 0.03-0.3 mSv [ped]	5	5	0	1	1	2	8	3	2	1	1
----------------------------	-----------------------------------	----------------	-------------	-----------------------	---	---	---	---	---	---	---	---	---	---	---

References	Study Quality
81 (11316362)	4
82 (11316355)	4

MRI cervical spine with IV contrast	May be appropriate (Disagreement)	Expert Opinion	0 0 mSv	0 0 mSv [ped]	5	5	3	2	3	2	2	4	2	0	1
-------------------------------------	-----------------------------------	----------------	---------	---------------	---	---	---	---	---	---	---	---	---	---	---

References	Study Quality
69 (25952173)	4
68 (25296275)	4
76 (3875878)	2
77 (12802004)	2
78 (11199429)	2
79 (15776239)	3
80 (12594568)	4

CT cervical spine without and with IV contrast	Usually not appropriate	Limited	☼☼☼ 1-10 mSv	☼☼☼☼ 3-10 mSv [ped]	3	3	7	1	7	2	0	0	2	0	0
--	-------------------------	---------	--------------	---------------------	---	---	---	---	---	---	---	---	---	---	---

References	Study Quality
69 (25952173)	4
70 (22677300)	4

FDG-PET/CT skull base to mid-thigh	Usually not appropriate	Limited	☼☼☼☼ 10-30 mSv	☼☼☼☼ 3-10 mSv [ped]	3	3	8	1	7	1	1	1	0	0	0	
		References	Study Quality													
		72 (25475377)	4													
		71 (29256136)	2													
		73 (9364643)	4													
Bone scan whole body with SPECT or SPECT/CT neck	Usually not appropriate	Limited	☼☼☼ 1-10 mSv	☼☼☼☼ 3-10 mSv [ped]	3	n/a	0	0	0	0	0	0	0	0	0	
		References	Study Quality													
		76 (3875878)	2													
Bone scan whole body with SPECT or SPECT/CT neck	Usually not appropriate	Limited	☼☼☼ 1-10 mSv	☼☼☼☼ 3-10 mSv [ped]	3	3	7	1	4	0	4	1	1	0	0	
		References	Study Quality													
		76 (3875878)	2													
CT myelography cervical spine	Usually not appropriate	Expert Consensus	☼☼☼☼ 10-30 mSv	☼☼☼ 0.3-3 mSv [ped]	2	2	9	3	3	1	2	0	0	0	0	
WBC scan whole body	Usually not appropriate	Expert Consensus	☼☼☼☼ 10-30 mSv	☼☼☼☼ 3-10 mSv [ped]	2	2	9	1	3	2	1	2	0	0	0	
Gallium scan whole body	Usually not appropriate	Limited	☼☼☼☼ 10-30 mSv		2	2	7	3	9	0	0	0	0	0	0	
		References	Study Quality													
		74 (11129162)	3													
		75 (26848173)	2													
CTA neck with IV contrast	Usually not appropriate	Expert Consensus	☼☼☼ 1-10 mSv	☼☼☼ 0.3-3 mSv [ped]	1	1	11	2	2	2	1	0	0	0	0	
Discography cervical spine	Usually not appropriate	Expert Consensus	☼☼ 0.1-1mSv		1	1	14	2	1	0	1	0	0	0	0	

Facet injection/medial branch block cervical spine	Usually not appropriate	Expert Consensus	☼☼ 0.1-1mSv		1	1	16	1	1	0	0	0	0	0	0
X-ray myelography cervical spine	Usually not appropriate	Limited	☼☼☼ 1-10 mSv		1	1	12	2	1	2	1	0	0	0	0
		References	Study Quality												
		17 (-3130497)	4												
MRA neck without IV contrast	Usually not appropriate	Expert Consensus	○ 0 mSv	○ 0 mSv [ped]	1	1	11	2	2	2	1	0	0	0	0
MRA neck with IV contrast	Usually not appropriate	Expert Consensus	○ 0 mSv	○ 0 mSv [ped]	1	1	12	2	3	1	0	0	0	0	0

Variant 5: Known malignancy. New or increasing nontraumatic cervical or neck pain or radiculopathy. Initial imaging.

Procedure	Appropriateness Category	SOE	Adults RRL	Peds RRL	Rating	Median	Final Tabulations								
							1	2	3	4	5	6	7	8	9
MRI cervical spine without and with IV contrast	Usually appropriate	Limited	○ 0 mSv	○ 0 mSv [ped]	9	9	0	0	0	0	1	0	2	4	11
		References	Study Quality												
		88 (25412631)	4												
		94 (-3127654)	4												
MRI cervical spine without IV contrast	Usually appropriate	Limited	○ 0 mSv	○ 0 mSv [ped]	7	7	0	0	0	2	0	4	8	4	1
		References	Study Quality												
		88 (25412631)	4												
		94 (-3127654)	4												
Radiography cervical spine	May be appropriate	Limited	☼☼ 0.1-1mSv	☼☼ 0.03-0.3 mSv [ped]	6	6	0	0	1	1	7	3	3	1	2
		References	Study Quality												
		87 (18191356)	3												

36 (16632616)	2
95 (26339464)	4
96 (11142324)	4

FDG-PET/CT whole body	Usually not appropriate	Limited	☼☼☼☼ 10-30 mSv	☼☼☼☼ 3-10 mSv [ped]	3	3	7	1	6	1	1	2	0	0	0
-----------------------	-------------------------	---------	----------------	---------------------	---	---	---	---	---	---	---	---	---	---	---

References	Study Quality
92 (20015657)	4
93 (25533313)	2

CTA neck with IV contrast	Usually not appropriate	Expert Consensus	☼☼☼ 1-10 mSv	☼☼☼ 0.3-3 mSv [ped]	1	1	10	2	4	1	1	0	0	0	0
---------------------------	-------------------------	------------------	--------------	---------------------	---	---	----	---	---	---	---	---	---	---	---

CT myelography cervical spine	Usually not appropriate	Expert Consensus	☼☼☼☼ 10-30 mSv	☼☼☼ 0.3-3 mSv [ped]	1	1	12	1	1	1	3	0	0	0	0
-------------------------------	-------------------------	------------------	----------------	---------------------	---	---	----	---	---	---	---	---	---	---	---

CT cervical spine without and with IV contrast	Usually not appropriate	Limited	☼☼☼ 1-10 mSv	☼☼☼☼ 3-10 mSv [ped]	1	1	10	2	5	0	1	0	1	0	0
--	-------------------------	---------	--------------	---------------------	---	---	----	---	---	---	---	---	---	---	---

References	Study Quality
88 (25412631)	4
87 (18191356)	3
86 (17890090)	2
89 (6831145)	3

Discography cervical spine	Usually not appropriate	Expert Consensus	☼☼ 0.1-1mSv		1	1	14	3	1	0	0	0	0	0	0
----------------------------	-------------------------	------------------	-------------	--	---	---	----	---	---	---	---	---	---	---	---

Facet injection/medial branch block cervical spine	Usually not appropriate	Expert Consensus	☼☼ 0.1-1mSv		1	1	16	1	1	0	0	0	0	0	0
--	-------------------------	------------------	-------------	--	---	---	----	---	---	---	---	---	---	---	---

X-ray myelography cervical spine	Usually not appropriate	Limited	☼☼☼ 1-10 mSv		1	1	11	2	2	3	0	0	0	0	0
----------------------------------	-------------------------	---------	--------------	--	---	---	----	---	---	---	---	---	---	---	---

References	Study Quality
17 (-3130497)	4

MRA neck without IV contrast	Usually not appropriate	Expert Consensus	0 0 mSv	0 0 mSv [ped]	1	1	11	2	4	0	1	0	0	0	0
------------------------------	-------------------------	------------------	---------	---------------	---	---	----	---	---	---	---	---	---	---	---

MRA neck with IV contrast	Usually not appropriate	Expert Consensus	0 0 mSv	0 0 mSv [ped]	1	1	11	3	4	0	0	0	0	0	0
Fluoride PET/CT whole body	Usually not appropriate	Limited	☼☼☼☼ 10-30 mSv		1	1	13	3	2	0	0	1	0	0	0
		References		Study Quality											
		90 (27634981)		4											
		91 (28872551)		2											

Variant 6: Cervicogenic headache and new or increasing nontraumatic cervical or neck pain. No neurologic deficit. Initial imaging.

Procedure	Appropriateness Category	SOE	Adults RRL	Peds RRL	Rating	Median	Final Tabulations								
							1	2	3	4	5	6	7	8	9
MRI cervical spine without IV contrast	May be appropriate (Disagreement)	Expert Opinion	0 0 mSv	0 0 mSv [ped]	5	5	3	0	1	3	6	3	1	2	0
		References		Study Quality											
		103 (2743413)		4											
		104 (14510932)		2											
Radiography cervical spine	May be appropriate	Limited	☼☼ 0.1-1mSv	☼☼ 0.03-0.3 mSv [ped]	5	5	0	0	2	6	4	5	1	1	0
		References		Study Quality											
		103 (2743413)		4											
		104 (14510932)		2											
CT cervical spine without IV contrast	May be appropriate	Limited	☼☼☼ 1-10 mSv	☼☼☼☼ 3-10 mSv [ped]	4	4	1	0	2	9	4	2	1	0	0
		References		Study Quality											
		103 (2743413)		4											
		104 (14510932)		2											
Facet injection/medial branch block cervical spine	May be appropriate	Expert Consensus	☼☼ 0.1-1mSv		4	4	4	2	3	6	2	2	0	0	0

Bone scan whole body with SPECT or SPECT/CT neck	Usually not appropriate	Limited	☼☼☼ 1-10 mSv	☼☼☼☼ 3-10 mSv [ped]	3	3	7	1	3	3	2	1	1	0	0
		References	Study Quality												
		106 (19643679)	4												
		36 (16632616)	2												
		105 (27262701)	4												
MRI cervical spine without and with IV contrast	Usually not appropriate	Limited	0 0 mSv	0 0 mSv [ped]	2	2	9	0	1	3	4	1	0	0	0
		References	Study Quality												
		103 (2743413)	4												
		104 (14510932)	2												
CTA neck with IV contrast	Usually not appropriate	Expert Consensus	☼☼☼ 1-10 mSv	☼☼☼ 0.3-3 mSv [ped]	1	1	10	1	1	3	2	0	1	0	0
CT myelography cervical spine	Usually not appropriate	Expert Consensus	☼☼☼☼ 10-30 mSv	☼☼☼ 0.3-3 mSv [ped]	1	1	14	2	2	0	0	0	0	0	0
CT cervical spine with IV contrast	Usually not appropriate	Limited	☼☼☼ 1-10 mSv	☼☼☼☼ 3-10 mSv [ped]	1	1	13	2	2	0	1	0	0	0	0
		References	Study Quality												
		103 (2743413)	4												
		104 (14510932)	2												
CT cervical spine without and with IV contrast	Usually not appropriate	Limited	☼☼☼ 1-10 mSv	☼☼☼☼ 3-10 mSv [ped]	1	1	13	1	3	1	0	0	0	0	0
		References	Study Quality												
		103 (2743413)	4												
		104 (14510932)	2												
Discography cervical spine	Usually not appropriate	Expert Consensus	☼☼ 0.1-1mSv		1	1	10	2	1	1	2	1	1	0	0
X-ray myelography cervical spine	Usually not appropriate	Expert Consensus	☼☼☼ 1-10 mSv		1	1	13	2	3	0	0	0	0	0	0

MRA neck without IV contrast	Usually not appropriate	Expert Consensus	○ 0 mSv	○ 0 mSv [ped]	1	1	10	1	1	4	1	1	0	0	0
MRA neck with IV contrast	Usually not appropriate	Expert Consensus	○ 0 mSv	○ 0 mSv [ped]	1	1	10	2	1	2	2	0	1	0	0
MRI cervical spine with IV contrast	Usually not appropriate	Limited	○ 0 mSv	○ 0 mSv [ped]	1	1	11	1	3	1	2	0	0	0	0
			References	Study Quality											
			103 (2743413)	4											
			104 (14510932)	2											

Variant 7: Chronic cervical or neck pain. Initial imaging.

Procedure	Appropriateness Category	SOE	Adults RRL	Peds RRL	Rating	Median	Final Tabulations								
							1	2	3	4	5	6	7	8	9
Radiography cervical spine	Usually appropriate	Limited	⊗⊗ 0.1-1mSv	⊗⊗⊗ 0.03-0.3 mSv [ped]	8	n/a	0	0	0	0	0	0	0	0	0
			References	Study Quality											
			107 (17347239)	4											
			108 (3787320)	2											
MRI cervical spine without IV contrast	May be appropriate (Disagreement)	Expert Opinion	○ 0 mSv	○ 0 mSv [ped]	5	n/a	0	0	0	0	0	0	0	0	0
			References	Study Quality											
			22 (26571180)	3											
			23 (9460946)	2											
CT cervical spine without IV contrast	Usually not appropriate	Expert Consensus	⊗⊗⊗ 1-10 mSv	⊗⊗⊗⊗ 3-10 mSv [ped]	3	n/a	0	0	0	0	0	0	0	0	0
MRI cervical spine without and with IV contrast	Usually not appropriate	Limited	○ 0 mSv	○ 0 mSv [ped]	2	n/a	0	0	0	0	0	0	0	0	0
			References	Study Quality											

113 (21269888)	4
22 (26571180)	3
21 (8107998)	3
23 (9460946)	2
114 (28139306)	4
115 (27492725)	4

Bone scan whole body with SPECT or SPECT/CT neck	Usually not appropriate	Limited	☼☼☼ 1-10 mSv	☼☼☼☼ 3-10 mSv [ped]	3	3	5	1	7	4	1	1	0	0	0
--	-------------------------	---------	--------------	---------------------	---	---	---	---	---	---	---	---	---	---	---

References	Study Quality
26 (23412368)	3
106 (19643679)	4

MRI cervical spine with IV contrast	Usually not appropriate	Strong	0 0 mSv	0 0 mSv [ped]	2	2	8	3	5	2	0	1	0	0	0
-------------------------------------	-------------------------	--------	---------	---------------	---	---	---	---	---	---	---	---	---	---	---

References	Study Quality
112 (19333104)	3
111 (10947922)	4
20 (25430861)	4
113 (21269888)	4
22 (26571180)	3
21 (8107998)	3
23 (9460946)	2
114 (28139306)	4
115 (27492725)	4

CTA neck with IV contrast	Usually not appropriate	Expert Consensus	☼☼☼ 1-10 mSv	☼☼☼ 0.3-3 mSv [ped]	1	1	10	3	2	2	1	0	0	0	0
---------------------------	-------------------------	------------------	--------------	---------------------	---	---	----	---	---	---	---	---	---	---	---

CT cervical spine with IV contrast	Usually not appropriate	Limited	☼☼☼ 1-10 mSv	☼☼☼☼ 3-10 mSv [ped]	1	1	11	2	1	2	2	0	0	0	0
------------------------------------	-------------------------	---------	--------------	---------------------	---	---	----	---	---	---	---	---	---	---	---

References	Study Quality
24 (17379279)	Inadequate

CT cervical spine without and with IV contrast	Usually not appropriate	Limited	☼☼☼ 1-10 mSv	☼☼☼☼ 3-10 mSv [ped]	1	1	11	2	1	3	1	0	0	0	0
		References	Study Quality												
		24 (17379279)	Inadequate												
Discography cervical spine	Usually not appropriate	Limited	☼☼ 0.1-1mSv		1	1	11	4	2	1	0	0	0	0	0
		References	Study Quality												
		1 (18204385)	4												
Facet injection/medial branch block cervical spine	Usually not appropriate	Limited	☼☼ 0.1-1mSv		1	1	10	2	2	2	1	1	0	0	0
		References	Study Quality												
		109 (18295649)	4												
		110 (15168223)	4												
X-ray myelography cervical spine	Usually not appropriate	Limited	☼☼☼ 1-10 mSv		1	1	10	1	1	4	2	0	0	0	0
		References	Study Quality												
		116 (5643913)	4												
MRA neck without IV contrast	Usually not appropriate	Expert Consensus	○ 0 mSv	○ 0 mSv [ped]	1	1	10	3	4	0	1	0	0	0	0
MRA neck with IV contrast	Usually not appropriate	Expert Consensus	○ 0 mSv	○ 0 mSv [ped]	1	1	10	3	4	0	1	0	0	0	0

Variant 9: Chronic cervical or neck pain without or with radiculopathy. Radiographs show ossification in the posterior longitudinal ligament (OPLL). Next imaging study.

Procedure	Appropriateness Category	SOE	Adults RRL	Peds RRL	Rating	Median	Final Tabulations								
							1	2	3	4	5	6	7	8	9
CT cervical spine without IV contrast	Usually appropriate	Limited	☼☼☼ 1-10 mSv	☼☼☼☼ 3-10 mSv [ped]	8	8	1	0	0	1	2	1	2	5	6
		References	Study Quality												

			120 (23179977)		4														
CT myelography cervical spine	May be appropriate (Disagreement)	Expert Opinion	☼☼☼☼ 10-30 mSv	☼☼☼ 0.3-3 mSv [ped]	5	5	0	1	3	4	4	3	2	1	1				
		References			Study Quality														
			121 (24153172)		3														
MRI cervical spine without IV contrast	May be appropriate (Disagreement)	Expert Opinion	○ 0 mSv	○ 0 mSv [ped]	5	5	0	1	1	1	1	2	8	4	1				
		References			Study Quality														
			122 (1636514)		3														
X-ray myelography cervical spine	Usually not appropriate	Limited	☼☼☼ 1-10 mSv		2	2	9	0	5	3	1	0	0	0	0				
		References			Study Quality														
			17 (-3130497)		4														
MRI cervical spine without and with IV contrast	Usually not appropriate	Limited	○ 0 mSv	○ 0 mSv [ped]	2	2	8	2	1	3	3	0	1	0	0				
		References			Study Quality														
			122 (1636514)		3														
CTA neck with IV contrast	Usually not appropriate	Expert Consensus	☼☼☼ 1-10 mSv	☼☼☼ 0.3-3 mSv [ped]	1	1	12	1	2	2	1	0	0	0	0				
CT cervical spine with IV contrast	Usually not appropriate	Limited	☼☼☼ 1-10 mSv	☼☼☼☼ 3-10 mSv [ped]	1	1	11	2	2	1	0	2	0	0	0				
		References			Study Quality														
			120 (23179977)		4														
CT cervical spine without and with IV contrast	Usually not appropriate	Limited	☼☼☼ 1-10 mSv	☼☼☼☼ 3-10 mSv [ped]	1	1	11	1	2	2	2	0	0	0	0				
		References			Study Quality														
			120 (23179977)		4														
Discography cervical spine	Usually not appropriate	Expert Consensus	☼☼ 0.1-1mSv		1	1	15	2	1	0	0	0	0	0	0				

Facet injection/medial branch block cervical spine	Usually not appropriate	Expert Consensus	☼☼ 0.1-1mSv		1	1	15	2	1	0	0	0	0	0	0
MRA neck without IV contrast	Usually not appropriate	Expert Consensus	○ 0 mSv	○ 0 mSv [ped]	1	1	12	2	3	0	1	0	0	0	0
MRA neck with IV contrast	Usually not appropriate	Expert Consensus	○ 0 mSv	○ 0 mSv [ped]	1	1	12	2	3	0	1	0	0	0	0
MRI cervical spine with IV contrast	Usually not appropriate	Limited	○ 0 mSv	○ 0 mSv [ped]	1	1	10	2	2	1	2	1	0	0	0
		References		Study Quality											
		122 (1636514)		3											
Bone scan whole body with SPECT or SPECT/CT neck	Usually not appropriate	Expert Consensus	☼☼☼ 1-10 mSv	☼☼☼☼ 3-10 mSv [ped]	1	1	13	2	2	1	0	0	0	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.