American College of Radiology ACR Appropriateness Criteria[®]

Chronic Hip Pain

Variant 1: Chronic hip pain. Initial Imaging.

	Appropri	ateness								F	inal '	Fabu	latior	ıs		
Procedure	Categ	ory	SOE	Adults RRL	Peds RRL	Rating	Median	1	2	3	4	5	6	7	8	9
Radiography hip	Usua approp		Limited	ତତତ 1-10 mSv		9	9	0	0	0	0	0	0	0	2	13
			References		Study	v Quality										
			15 (11567537)			4										
			14 (12578996)			4										
			13 (22915391)			4										
			12 (12783223)			3			-							
Radiography pelvis	Usua approp		Limited	֎֎ 0.1-1mSv	0.03- 0.3 mSv [ped]	9	9	0	0	0	0	0	0	0	6	9
			References		Study	v Quality										
			15 (11567537)			4										
			14 (12578996)			4										
			13 (22915391)			4										
			12 (12783223)		1	3		_	-							
CT arthrography hip	Usually approp		Expert Consensus	ତତତ 1-10 mSv		1	1	15	0	0	0	0	0	0	0	0
CT hip without IV contrast	Usually approp		Expert Consensus	ତତତ 1-10 mSv		1	1	12	1	2	0	0	0	0	0	0
MR arthrography hip	Usually approp		Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	14	0	0	0	1	0	0	0	0

MRI hip without IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	12	1	1	0	1	0	0	0	0
MRI hip without and with IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	13	1	0	1	0	0	0	0	0
Bone scan hip	Usually not appropriate	Expert Consensus	ବ୍ୟବହ 1-10 mSv		1	1	14	1	0	0	0	0	0	0	0
US hip	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	11	0	1	1	2	0	0	0	0
CT hip with IV contrast	Usually not appropriate	Expert Consensus	ତତତ 1-10 mSv		1	1	14	1	0	0	0	0	0	0	0
CT hip without and with IV contrast	Usually not appropriate	Expert Consensus	ତତତ 1-10 mSv		1	1	15	0	0	0	0	0	0	0	0
Fluoride PET/CT skull base to mid-thigh	Usually not appropriate	Expert Consensus	ବଟଟଟ 10-30 mSv		1	1	15	0	0	0	0	0	0	0	0
Image-guided anesthetic +/- corticosteroid injection hip joint or surrounding structures	Usually not appropriate	Expert Consensus	Varies	Varies	1	1	14	1	0	0	0	0	0	0	0

Variant 2: Chronic hip pain. Suspect noninfectious extra-articular abnormality, such as tendonitis or bursitis. Radiographs negative or nondiagnostic. Next imaging study.

	Appropriateness				D.C				I	Final	Tabu	latio	ons		
Procedure	Category	SOE	Adults RRL	Peds RRL	Rating	Median	1	2	3	4	5	6	7	8	9
MRI hip without IV contrast	Usually appropriate	Strong	O 0 mSv	O 0 mSv [ped]	9	9	0	0	0	0	0	0	2	1	12
		References		Study	Quality										
		23 (22038311)			М										
		24 (31243547)			2										
		25 (16275576)			4										
		26 (16275579)			4										
		27 (16275574)			4										

								_								
			28 (16275584)			4										
			29 (16275577)			4										
			30 (19887296)			4										
			31 (16275583)			4										
			32 (16275580)			4										
			33 (16275578)			4										
			34 (16275571)			4										
			35 (22403167)			2										
			36 (33474984)			4										
			37 (26102391)			3				-						
US hip	Usua approp	ally priate	Limited	O 0 mSv	O 0 mSv [ped]	7	7	0	0	0	0	5	2	4	2	2
			References		Stuc	ly Quality				-				·		
			23 (22038311)			М]								
			38 (8596860)			4										
			39 (21136580)			4										
			40 (18287424)			4										
			41 (21381497)			3										
Image-guided anesthetic +/- corticosteroid injection hip joint or surrounding structures	May approp	be briate	Moderate	Varies	Varies	5	5	0	0	0	1	9	2	2	0	1
			References		Stuc	ly Quality										
			19 (16177412)			4										
			20 (-3195116)			4										
			21 (15494331)			3										
			22 (23852899)			2										
CT hip without IV contrast	Usuall approp		Limited	ତତତ 1-10 mSv)	2	2	7	2	4	2	0	0	0	0	0
			References		Stuc	ly Quality										
			18 (21298428)			2										

CT arthrography hip	Usually not appropriate	Strong	ଡଡଡ 1-10 mSv		1	1	9	1	2	0	2	1	0	0	0
		References		Study	Quality										
		16 (20716653))		3										
		17 (24071389))		2										
		18 (21298428)			2		_	-	-		-		-		
MR arthrography hip	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	9	1	2	0	2	1	0	0	0
MRI hip without and with IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	9	0	1	1	3	1	0	0	0
Bone scan hip	Usually not appropriate	Expert Consensus	֎֎֎ 1-10 mSv		1	1	15	0	0	0	0	0	0	0	0
CT hip with IV contrast	Usually not appropriate	Expert Consensus	ଡଡଡ 1-10 mSv		1	1	10	4	1	0	0	0	0	0	0
CT hip without and with IV contrast	Usually not appropriate	Expert Consensus	ଡଡଡ 1-10 mSv		1	1	13	2	0	0	0	0	0	0	0
Fluoride PET/CT skull base to mid-thigh	Usually not appropriate	Expert Consensus	ତତତତ 10-30 mSv		1	1	14	1	0	0	0	0	0	0	0

Variant 3: Chronic hip pain. Suspect impingement or dysplasia. Radiographs negative or nondiagnostic. Next imaging study.

	Appropri	iateness								I	Final	Tabu	latio	ns		
Procedure	Categ		SOE	Adults RR	L Peds RRI	Rating	Median	1	2	3	4	5	6	7	8	9
MR arthrography hip	Usua approp		Strong	O 0 mSv	O 0 mSv [ped]	8	8	0	0	0	0	0	0	3	7	5
			References		Sti	dy Quality										
			70 (16530634)			4										
			69 (16530635)			4										
			68 (17114529)			2										
			67 (21048174)			2										

66 (20872764) 2 65 (22933499) 3 71 (3048144) 3 53 (3102306) 3 52 (24656977) 2 55 (2470140) 2 55 (2470140) 2 55 (2470140) 2 55 (2470140) 2 55 (2470140) 2 56 (20859632) M 18 (21298428) 2 16 (20716653) 3 57 (2307389) 2 57 (2307389) 2 60 (19455497) 3 71 (30048142) 2 58 (15800516) 2 58 (15800516) 2 69 (16530633) 4 69 (16530633) 4 69 (16530633) 4 69 (16530633) 3 61 (114529) 2 66 (209715) 2 66 (209715) 2 67 (230349) 3 67 (230349) 3 67 (230535) 4 67 (2307393) 2 68 (17114529) 2 67 (23053349)																
72 (31633993) 2 71 (30048144) 3 53 (31023206) 3 52 (24656977) 2 55 (24370140) 2 55 (24370140) 2 56 (20859632) M 18 (21298428) 2 56 (20859632) M 18 (21298428) 2 57 (227399) 2 58 (15800516) 2 57 (2307399) 2 60 (19455497) 3 60 (19455497) 3 70 (1653063) 4 60 (1945497) 2 60 (19455497) 3 8 (17) (4529) 2 60 (19455497) 3 71 (306303) 4 60 (19455497) 2 68 (17) (4529) 2 68 (17) (4529) 2 68 (17) (4529) 2 69 (1653063) 4 70 (1653063) 4 71 (30048144) 3 72 (31633993) 2 65 (22933489) 3 71 (30048144) 3 72 (31			66 (20872764)			2										
71 (30048144) 3 53 (31023206) 3 55 (24370140) 2 55 (24370140) 2 55 (24370140) 2 55 (24370140) 2 56 (20859632) M 16 (21296428) 2 59 (22878728) 2 59 (22878728) 2 60 (19455497) 3 60 (19455497) 3 60 (19455497) 3 60 (19455497) 3 60 (19455497) 3 60 (19455497) 3 60 (19455497) 3 60 (19455497) 3 80 (190 mSV 10 n 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			65 (22933489)													
S3 (31023206) 3 S2 (24656977) 2 S5 (24370140) 2 S4 (25022979) 2 S6 (20685632) M I8 (21294428) 2 I6 (2071653) 3 S8 (15800516) 2 S7 (2307389) 2 60 (19455497) 3 MRI hip without IV contrast Usually appropriate Strong 0 0 mSv 8 8 0 0 0 2 8 5 MRI hip without IV contrast Usually appropriate Strong 0 0 0 mSv 0 0 0 0 0 0 0 0 0 2 8 5 MRI hip without IV contrast Usually appropriate Strong 0 0 0 mSv 0 0 0 0 0 0 0 2 8 5 66 (17)14529) 2 6 2 6 6 2 5 5 65 (22933489) 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			72 (31633993)													
S2 (24656977) 2 55 (24370140) 2 54 (25022979) 2 56 (20859632) M 18 (21298428) 2 59 (22878728) 2 58 (15800516) 2 57 (23073899) 2 60 (194554977) 3 MRI hip without IV contrast Usually appropriate 0 0 mSv 8 8 0 0 0 2 8 5 KIS (15800516) 2			71 (30048144)													
S5 (24370140) 2 54 (25022979) 2 56 (20859632) M 18 (21298428) 2 59 (22778728) 2 58 (15800516) 2 57 (23073899) 2 60 (19455497) 3 60 (19455497) 3 71 (20073899) 2 68 (17114529) 2 68 (17114529) 2 69 (16530635) 4 64 (2207475) 2 65 (2933489) 3 71 (30048144) 3 71 (3048144) 3 71 (3048144) 3 71 (3048144) 3 71 (3048144) 3 71 (3048144) 3 71 (3048144) 3 71 (3048144) 3 71 (3048144) 3 43 (2627933) 2 44 (2395032) 4			53 (31023206)			3										
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56 (20859632) M 18 (2129428) 2 16 (20716653) 3 59 (22878728) 2 58 (15800516) 2 60 (19455497) 3 60 (19455497) 3 MRI hip without IV contrast Usually appropriate Strong O 0 mSv O 0 mSv Image: Contract of the			55 (24370140)			2										
I8 (21298428) 2 16 (20716653) 3 59 (22878728) 2 58 (15800516) 2 60 (19455497) 3 60 (19455497) 3 MRI hip without IV contrast Usually appropriate Strong 0 0 mSv 0 0 mSv 0 0 mSv 0 0 mSv 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			54 (25022979)			2										
Ind (20716653) 3 59 (22878728) 2 58 (15800516) 2 57 (23073899) 2 60 (19455497) 3 References Study Quality appropriate Strong 0 0 mSv 0 0 mSv 8 8 0 0 0 0 0 0			56 (20859632)			М										
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			18 (21298428)			2										
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			16 (20716653)			3										
S7 (23073899) 2 60 (19455497) 3 MRI hip without IV contrast Usually appropriate Strong O 0 mSv O 0 mSv [ped] 8 8 0 0 0 0 2 8 5 MRI hip without IV contrast Usually appropriate Strong O 0 mSv O 0 mSv [ped] 8 8 0 0 0 0 2 8 5 66 (15300516) 2			59 (22878728)			2										
MRI hip without IV contrast Usually appropriate Strong O 0 mSv O 0 mSv [ped] 8 8 0 <th< td=""><td></td><td></td><td>58 (15800516)</td><td></td><td></td><td>2</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>			58 (15800516)			2										
MRI hip without IV contrast Usually appropriate Strong O 0 mSv [ped] 8 8 0 0 0 0 2 8 5 References Study Quality 58 (15800516) 2 68 (17114529) 2 69 (16530635) 4 69 (16530635) 4 64 (22907475) 2 65 (22933489) 3 71 (30048144) 3 72 (31633993) 2 4 45 (22985733) 2 4 43 (16721954) 4 4 42 (16211385) 4 <td></td> <td></td> <td>57 (23073899)</td> <td></td> <td></td> <td>2</td> <td></td>			57 (23073899)			2										
Appropriate Strong O 0 mSv Iped] 8 8 0 </td <td></td> <td></td> <td>60 (19455497)</td> <td></td> <td></td> <td>3</td> <td></td>			60 (19455497)			3										
$\begin{array}{ c c c c c c }\hline 58 (15800516) & 2 \\\hline 68 (17114529) & 2 \\\hline 69 (16530635) & 4 \\\hline 70 (16530634) & 4 \\\hline 64 (22907475) & 2 \\\hline 65 (22933489) & 3 \\\hline 71 (30048144) & 3 \\\hline 72 (31633993) & 2 \\\hline 44 (2395032) & 4 \\\hline 45 (22985733) & 2 \\\hline 43 (16721954) & 4 \\\hline 42 (16211385) & 4 \\\hline \end{array}$	MRI hip without IV contrast	Usually appropria	y Strong	O 0 mSv		8	8	0	0	0	0	0	0	2	8	5
$\begin{array}{ c c c c c c c }\hline & & & & & & & & & & & & & & & & & & &$			References		Study	Quality										
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			58 (15800516)			2										
$\begin{array}{c c c c c c c c c c c c c c c c c c c $						2										
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			69 (16530635)			4										
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			70 (16530634)			4										
71 (30048144) 3 72 (31633993) 2 44 (23395032) 4 45 (22985733) 2 43 (16721954) 4 42 (16211385) 4			64 (22907475)			2										
72 (31633993) 2 44 (23395032) 4 45 (22985733) 2 43 (16721954) 4 42 (16211385) 4			65 (22933489)			3										
44 (23395032) 4 45 (22985733) 2 43 (16721954) 4 42 (16211385) 4			71 (30048144)			3										
45 (22985733) 2 43 (16721954) 4 42 (16211385) 4			72 (31633993)			2										
43 (16721954) 4 42 (16211385) 4			44 (23395032)			4										
43 (16721954) 4 42 (16211385) 4			45 (22985733)			2										
42 (16211385) 4						4										
46 (22492172) 4						4										
			46 (22492172)			4										

		48 (25558377))		3										
		47 (18984718)			4										
Radiography hip additional views	May be appropriate	Limited	֎֎ 0.1-1mSv		6	6	0	0	0	2	3	3	1	0	6
		References		Study	y Quality										
		47 (18984718))		4			-							
CT arthrography hip	May be appropriate	Limited	ଡେଡ େ 1-10 mSv		5	5	0	0	0	1	12	2	0	0	0
		References		Study	y Quality										
		42 (16211385))		4										
		43 (16721954))		4										
		44 (23395032))		4										
		17 (24071389))		2										
		16 (20716653)		1	3										
CT hip without IV contrast	May be appropriate	Limited	େଟେଟ 1-10 mSv		5	5	0	1	0	1	6	3	2	1	1
		References		Study	y Quality										
		42 (16211385))		4										
		43 (16721954))		4										
		44 (23395032))		4										
		62 (8451409)			4										
		45 (22985733))		2										
		46 (22492172)			4										
		48 (25558377)			3										
		47 (18984718)			4										
		49 (29406341))	1	4						<u>г г</u>				
Image-guided anesthetic +/- corticosteroid injection hip joint or surrounding structures	May be appropriate	Moderate	Varies	Varies	5	5	0	0	2	0	11	2	0	0	0
		References		Study	y Quality										
		19 (16177412))		4										

		20 (-3195116)			4										
		21 (15494331)			3										
		22 (23852899)			2										
US hip	Usually not appropriate	Strong	O 0 mSv	O 0 mSv [ped]	3	3	4	3	2	2	3	0	1	0	0
		References		Study	V Quality										
		17 (24071389)			2										
		41 (21381497)			3										
		39 (21136580)			4										
		73 (27405494)		_	2						1				
MRI hip without and with IV contrast	Usually not appropriate	Strong	O 0 mSv	O 0 mSv [ped]	1	1	8	2	5	0	0	0	0	0	0
		References		Study	/ Quality										
		34 (16275571)			4										
		61 (8657921)			3										
		62 (8451409)			4										
		63 (12606867)			4										
		64 (22907475)			2										
		65 (22933489)			3										
		66 (20872764)			2										
		67 (21048174)			2					-					
Bone scan hip	Usually not appropriate	Expert Consensus	ତେତେ 1-10 mSv		1	1	15	0	0	0	0	0	0	0	0
CT hip with IV contrast	Usually not appropriate	Limited	֎֎֎ 1-10 mSv		1	1	12	1	1	1	0	0	0	0	0
		References		Study	/ Quality										
		42 (16211385)			4										
		43 (16721954)			4										
		44 (23395032)			4										
CT hip without and with IV contrast	Usually not appropriate	Limited	ଝେଝଡ 1-10 mSv		1	1	12	2	1	0	0	0	0	0	0

		References			Study	Quality										
		42 (16211385)				4										
		43 (16721954)				4										
		44 (23395032)				4										
Fluoride PET/CT skull base to mid-thigh	Usuall approp	Limited	֎֎֎֎ 10- mSv	30		1	1	12	1	2	0	0	0	0	0	0
		References			Study	Quality										
		50 (26745810)				4										
		51 (31470763)				4										

Variant 4: Chronic hip pain. Suspect labral tear. Radiographs negative or nondiagnostic. Next imaging study.

	Appropriateness	COL			D (1				F	'inal '	Tabu	latio	ns		
Procedure	Category	SOE	Adults RRL	Peds RRL	Rating	Median	1	2	3	4	5	6	7	8	9
MR arthrography hip	Usually appropriate	Strong	O 0 mSv	O 0 mSv [ped]	9	9	0	0	0	0	0	0	2	2	11
		References		Study	v Quality										
		80 (19380568)			3										
		79 (17712555)			4										
		78 (11479747)			4										
		77 (17383908)			3										
		76 (10430132)			2										
		75 (22865251)			2										
		82 (16857978)			2										
		81 (15972331)			4										
		52 (24656977)			2										
		18 (21298428)			2										
		16 (20716653)			3										
		59 (22878728)			2										
		58 (15800516)			2										

		57 (23073899)			2										
		56 (20859632)			<u>2</u> M										
MRI hip without IV contrast		30 (20839032)													
WINI IIIp without IV contrast	Usually appropriate	Strong	O 0 mSv	O 0 mSv [ped]	8	8	0	0	0	0	0	0	3	6	6
		References		Study	y Quality										
		85 (29843749)			2										
		79 (17712555)			4										
		78 (11479747)			4										
		77 (17383908)			3										
		76 (10430132)			2										
		70 (16530634)			4										
		69 (16530635)			4										
		86 (16436825)			4										
		58 (15800516)			2										
		68 (17114529)			2										
CT arthrography hip	May be appropriate	Strong	ତତତ 1-10 mSv		6	6	0	0	0	0	6	3	4	1	1
		References		Study	y Quality										
		18 (21298428)			2										
		17 (24071389)			2										
		74 (30838104)			3										
Image-guided anesthetic +/- corticosteroid injection hip joint or surrounding structures	May be appropriate	Moderate	Varies	Varies	5	5	0	0	0	2	12	1	0	0	0
		References		Study	y Quality										
		22 (23852899)			2										
		21 (15494331)			3										
		20 (-3195116)			4					-					
US hip	Usually not appropriate	Strong	O 0 mSv	O 0 mSv [ped]	2	2	6	3	2	2	1	0	1	0	0
		References		Study	y Quality										

			88 (19421915)			1										
			87 (30203593)			3										
			17 (24071389)			2										
			41 (21381497)			3										
			39 (21136580)			4									•	
CT hip without IV contrast	Usually approp	y not riate	Expert Consensus	ଡେଡେ 1-10 mSv		1	1	12	1	1	1	0	0	0	0	0
MRI hip without and with IV contrast	Usually approp				O 0 mSv [ped]	1	1	8	2	3	0	2	0	0	0	0
			References		Study	y Quality										
			34 (16275571)			4										
			63 (12606867)		4											
			62 (8451409)			4										
			61 (8657921)			3										
			84 (20173149)			3										
			83 (25277527)		1	3		_	1		1					
Bone scan hip	Usually approp		Expert Consensus	ଝେଝ 1-10 mSv		1	1	15	0	0	0	0	0	0	0	0
CT hip with IV contrast	Usually approp		Expert Consensus	ତତତ 1-10 mSv		1	1	11	3	0	1	0	0	0	0	0
CT hip without and with IV contrast	Usually approp		Expert Consensus	ତତତ 1-10 mSv		1	1	13	1	1	0	0	0	0	0	0
Fluoride PET/CT skull base to mid-thigh	Usually approp		Expert Consensus	ଡଡଡଡ 10-3(mSv	0	1	1	15	0	0	0	0	0	0	0	0

Variant 5: Chronic hip pain. Radiographs equivocal or positive for mild osteoarthritis. Evaluate articular cartilage integrity. Next imaging study.

Procedure	Appropriateness	SOF			Detter	Maltan			F	inal	Tabu	latio	ns		
	Category	SOE	Adults RRL	Peds RRL	Rating	Median	1	2	3	4	5	6	7	8	9
MR arthrography hip	Usually	Strong	O 0 mSv	O 0 mSv	9	9	0	0	0	1	0	0	2	3	9

	Appropria	ateness	~ ~ ~]	Final	Tabu	latio	ıs		
Procedure	Catego	ory	SOE	Adults RRL	Peds RRL	Rating	Median	1	2	3	4	5	6	7	8	9
	approp	riate			[ped]											
			References		Study	Quality										
			89 (21822939)			4										
			95 (26001258)			4										
			55 (24370140)			2										
			52 (24656977)			2										
MRI hip without IV contrast	Usual appropi		Strong	O 0 mSv	O 0 mSv [ped]	9	9	0	0	0	0	0	0	3	4	8
			References		Study Quality 2											
			18 (21298428)													
			85 (29843749)													
	89 (21822939)					4										
			98 (27325163)			4										
	_		93 (25352941)			3										
			91 (16037508)		-	1			1							
CT arthrography hip	May appropr		Strong	ଝଝଝ 1-10 mSv		6	6	0	0	0	2	2	4	2	3	2
			References		Study	/ Quality										
			89 (21822939)			4										
			18 (21298428)			2										
			93 (25352941)			3										
			92 (16990027)			2										
		91 (16037508)				1										
		90 (16242374)			-	3										
Image-guided anesthetic +/- corticosteroid injection hip joint or surrounding structures	Usually appropr		Limited	Varies	Varies	2	2	7	1	2	2	1	1	0	1	0
			References		Study	v Quality										

			94 (30415421)			4										
CT hip without IV contrast	Usuall approp		Expert Consensus	ତେତେ 1-10 mSv		1	1	12	2	0	1	0	0	0	0	0
MRI hip without and with IV contrast	Usuall approp		Limited	O 0 mSv	O 0 mSv [ped]	1	1	9	2	4	0	0	0	0	0	0
		References			Study	/ Quality		-								
			97 (26304042)			3										
	97 (26304042) 96 (28209142)			Inac	lequate		_	-		-						
Bone scan hip	Usually not appropriate		Expert Consensus	ତେତତ 1-10 mSv		1	1	15	0	0	0	0	0	0	0	0
US hip	Usuall approp		Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	10	3	1	1	0	0	0	0	0
CT hip with IV contrast	Usuall approp		Expert Consensus	େଟେେ 1-10 mSv		1	1	13	1	0	1	0	0	0	0	0
CT hip without and with IV contrast	Usuall approp		Expert Consensus	ଡେଡଡ 1-10 mSv		1	1	13	2	0	0	0	0	0	0	0
Fluoride PET/CT skull base to mid-thigh	Usuall approp		Expert Consensus	ବ୍ୟବ୍ୟକ 10-30 mSv		1	1	15	0	0	0	0	0	0	0	0

Variant 6: Chronic hip pain. Radiographs suspicious for intra-articular synovial hyperplasia or neoplasia, including nodular synovitis, diffuse tenosynovial giant cell tumor, osteochondromatosis, other synovial neoplasm. Next imaging study.

	Appropriateness	COL			D (1				F	'inal '	Tabu	latio	ns		
Procedure	Category	SOE	Adults RRL	Peds RRL	Rating	Median	1	2	3	4	5	6	7	8	9
MRI hip without IV contrast	Usually appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	8	8	0	0	0	0	1	0	1	8	5
MRI hip without and with IV contrast	Usually appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	8	8	0	0	1	1	0	2	1	4	6
CT arthrography hip	May be appropriate	Expert Consensus	ତେତେ 1-10 mSv		4	4	1	1	3	4	5	0	0	0	1

CT hip without IV contrast	Usually not	Expert	ତତତ 1-10		3	3	4	3	4	2	2	0	0	0	0
	appropriate	Consensus	mSv												
Image-guided aspiration hip	Usually not appropriate	Limited	Varies	Varies	3	3	6	0	2	3	4	0	0	0	0
		References		Study	Quality										
		100 (2383449)			4										
		99 (2845469)			4										
MR arthrography hip	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	2	2	7	2	5	1	0	0	0	0	0
Bone scan hip	Usually not appropriate	Expert Consensus	ତତତ 1-10 mSv		1	1	14	1	0	0	0	0	0	0	0
US hip	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	10	1	2	1	0	0	1	0	0
CT hip with IV contrast	Usually not appropriate	Expert Consensus	ଡେଡେ 1-10 mSv		1	1	13	0	0	2	0	0	0	0	0
CT hip without and with IV contrast	Usually not appropriate	Expert Consensus	ଡେଡେ 1-10 mSv		1	1	10	0	3	0	0	0	1	0	1
Fluoride PET/CT skull base to mid-thigh	Usually not appropriate	Expert Consensus	ବଟଟତ 10-30 mSv		1	1	13	0	0	1	0	0	1	0	0
Image-guided anesthetic +/- corticosteroid injection hip joint or surrounding structures	Usually not appropriate	Expert Consensus	Varies	Varies	1	1	14	0	1	0	0	0	0	0	0

Variant 7: Chronic hip pain with low back or knee pathology or pain. Radiographs demonstrate hip osteoarthritis. Want to quantify amount of pain related to the hip. Next imaging study.

	Appropriateness	COF							F	'inal '	Tabu	latio	ns		
Procedure	Category	SOE	Adults RRL	Peds RRL	Rating	Median	1	2	3	4	5	6	7	8	9
Image-guided anesthetic +/- corticosteroid injection hip joint or surrounding structures	Usually appropriate	Moderate	Varies	Varies	9	9	0	0	0	0	2	1	0	3	9

		References	Study	y Quality											
		22 (23852899)			2										
		21 (15494331)			3										
		20 (-3195116)			4										
		19 (16177412)			4						1				
CT arthrography hip	Usually approp	Strong	ଝିଝିଝି 1-10 mSv		1	1	11	2	2	0	0	0	0	0	0
		References		Study	Quality										
		18 (21298428)			2										
		93 (25352941)		3											
		92 (16990027)		2											
		91 (16037508)		1											
		90 (16242374)			3										
		13 (22915391)	_	4											
CT hip without IV contrast	Usually approp	Expert Consensus	ଷଷ≎ 1-10 mSv		1	1	13	0	1	0	0	1	0	0	0
MR arthrography hip	Usually approp	Limited	O 0 mSv	O 0 mSv [ped]	1	1	10	1	1	2	1	0	0	0	0
		References		Study	Quality			•							
		13 (22915391)		-	4										
MRI hip without IV contrast	Usually approp	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	11	2	2	0	0	0	0	0	0
MRI hip without and with IV contrast	Usually approp	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	11	1	1	0	1	1	0	0	0
Bone scan hip	Usually approp	Expert Consensus	ତତତ 1-10 mSv		1	1	12	0	1	1	0	0	0	0	1
US hip	Usually approp	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	13	0	1	0	1	0	0	0	0
CT hip with IV contrast	Usually approp	Expert Consensus	ତତତ 1-10 mSv		1	1	14	1	0	0	0	0	0	0	0

CT hip without and with IV contrast	Usually not appropriate	Expert Consensus	ତତତ 1-10 mSv	1	1	14	1	0	0	0	0	0	0	0
Fluoride PET/CT skull base to mid-thigh	Usually not appropriate	Expert Consensus	ଷ®ଷ® 10-30 mSv	1	1	14	0	0	0	0	0	0	0	1

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.