

The Weill Cornell Hip Pain Appropriate Use Criteria (AUC) addresses twenty-two clinical conditions common to patients presenting with Hip Pain and makes recommendations to optimize diagnostic effectiveness.

Common Clinical Conditions – Hip Pain	
0	Not Hip Pain
1	Acetabular Labral Tear Known or Suspected
2	Arthroplasty Loosening Known or Suspected - Status Post
3	Avascular Necrosis Known or Suspected - Hip
4	Cancer Known or Suspected - Hip
5	Hematoma - Hip
6	Hernia Known or Suspected
7	Heterotopic Bone Known or Suspected - Hip
8	Hip Pain without Trauma
9	Iliopsoas Subluxation
10	Impingement - Hip
11	Infection Known or Suspected - Hip
12	Inflammatory Arthritis Known or Suspected - Hip
13	Lateral Femoral Cutaneous Nerve Compression
14	Mass Known or Suspected - Hip
15	Muscle Tendon Disorder
16	Osteoarthritis Known or Suspected - Hip
17	Piriformis Syndrome - Sciatic Nerve Irritation
18	Post-Fracture Healing Assessment - Hip
19	Preoperative Planning or Known Hip Fracture
20	Soft Tissue Injury - Hip
21	Tendon Injury Repair Hip - Status Post
22	Traumatic Hip Pain - Known or Suspected Fracture

The Hip Pain AUC is activated when a user orders one of the following fourteen Advanced Imaging Procedures.

Advanced Imaging Procedures	
1	CT Arthrogram Hip
2	CT Hip without Contrast
3	CT Hip with Contrast
4	CT Hip with and without contrast
5	MR Arthrogram Hip
6	MR Hip without Contrast
7	MR Hip with Contrast
8	MR Hip with and without Contrast
9	CT Pelvis without Contrast
10	CT Pelvis with Contrast
11	CT Pelvis with and without Contrast
12	MR Pelvis without Contrast
13	MR Pelvis with Contrast
14	MR Pelvis with and without Contrast

The Hip Pain AUC recommends one of the following twelve Imaging Procedures based on the clinical condition.

Recommended Imaging Procedures	
1	CT Arthrogram Hip
2	CT Hip without Contrast
3	CT Hip with Contrast
4	CT Hip with and without contrast
5	MR Arthrogram Hip
6	MR Hip without Contrast
7	MR Hip with Contrast
8	MR Hip with and without Contrast
9	MR Lumbar Plexus without Contrast
10	NM Bone Scan
11	XR Hip
12	US Hip

Logic Tables

The following Clinical Condition Logic Tables provide the Hip Pain AUC logic for each clinical condition.

The logic includes priors, contraindications, metal reduction and advanced US techniques where applicable.

Key

Value	Score
Blank	No Score Assigned
0	AUC Not Applicable
1	Inappropriate
2	Contact Radiology
3	Appropriate
4	Appropriate Preferred

Condition 0 – Not Hip Pain AUC Logic Activated, AUC Not Applicable

Condition	CT Arth	CT w	CT wo	CT wwo	MR w	MR wo	MR wwo	MR Arth	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo	Reference
Not Hip Pain	0	0	0	0	0	0	0	0					0	0	0	0	0	0	1

Condition 1 - Acetabular Labral Tear Known or Suspected

Condition	Contraindications	CT Hip Arth	CT Hip w	CT Hip wo	CT Hip wwo	MR Hip w	MR Hip wo	MR Hip wwo	MR Arth Hip	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo	References
Acetabular Labral Tear		1	1	1	1	1	4	1	4					1	1	1	1	1	1	1,4,5,7, LBP
Acetabular Labral Tear	GAD	1	1	1	1	1	4	1	1					1	1	1	1	1	1	
Acetabular Labral Tear	MR	2	2	2	2	2	2	2	2					2	2	2	2	2	2	

Condition 2 - Arthroplasty Loosening Known or Suspected - Status Post

Condition	Priors Metal Reduction?	Contraindications	CT Arth Hip	CT Hip w	CT Hip wo	CT Hip wwo	MR Hip w	MR Hip wo	MR Hip wwo	MR Arth Hip	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo	References
Arthroplasty Loosening	No XR		1	1	1	1	1	1	1	1			4		1	1	1	1	1	1	9, 10, LBP
Arthroplasty Loosening	XR, Yes		1	1	4	1	1	4	1	1					1	1	1	1	1	1	
Arthroplasty Loosening	XR, Yes	CT	1	1	1	1	1	4	1	1					1	1	1	1	1	1	
Arthroplasty Loosening	XR, No	MR	1	1	4	1	1	1	1	1					1	1	1	1	1	1	
Arthroplasty Loosening	XR, No	CT MR	2	2	2	2	2	2	2	2					2	2	2	2	2	2	

Condition 3 – Avascular Necrosis Known or Suspected

Condition	Priors	Contraindications	CT Arth Hip	CT Hip w	CT Hip wo	CT Hip wwo	MR Hip w	MR Hip wo	MR Hip wwo	MR Arth Hip	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo	References
Avascular Necrosis	No XR		1	1	1	1	1	1	1	1			4		1	1	1	1	1	1	1, 11
Avascular Necrosis	XR		1	1	1	1	1	4	1	1					1	1	1	1	1	1	11
Avascular Necrosis	XR	MR	2	2	2	2	2	2	2	2					2	2	2	2	2	2	11

Condition 4 – Cancer Known or Suspected

Condition	Priors	Contraindications	CT Arth Hip	CT Hip w	CT Hip wo	CT Hip wwo	MR Hip w	MR Hip wo	MR wwo	MR Arth	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo	References
Cancer	No XR		1	1	1	1	1	1	1	1			4		1	1	1	1	1	1	1
Cancer	XR		1	1	3	1	1	3	4	1		3			1	1	1	1	1	1	1, 2, 3, LBP
Cancer	XR	GAD	1	3	3	1	1	4	1	1		3			1	1	1	1	1	1	
Cancer	XR	IOD	1	1	3	1	1	3	4	1		3			1	1	1	1	1	1	
Cancer	XR	MR	1	3	3	1	1	1	1	1		3			1	1	1	1	1	1	
Cancer	XR	CT	1	1	1	1	1	3	4	1		3			1	1	1	1	1	1	
Cancer	XR	GAD IOD	1	1	3	1	1	4	1	1		3			1	1	1	1	1	1	
Cancer	XR	GAD CT	1	1	1	1	1	4	1	1		3			1	1	1	1	1	1	
Cancer	XR	MR IOD	1	1	4	1	1	1	1	1		3			1	1	1	1	1	1	
Cancer	XR	MR CT	2	2	2	2	2	2	2	2					2	2	2	2	2	2	

Condition 5 – Hematoma Known or Suspected

Condition	Contraindications	CT Arth Hip	CT Hip w	CT Hip wo	CT Hip wwo	MR Hip w	MR Hip wo	MR wwo	MR Arth	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo	References
Hematoma		1	1	4	1	1	4	1	1				4	1	1	1	1	1	1	LBP
Hematoma	MR	1	1	4	1	1	1	1	1				4	1	1	1	1	1	1	
Hematoma	CT	1	1	1	1	1	4	1	1				4	1	1	1	1	1	1	
Hematoma	MR CT	1	1	1	1	1	1	1	1				4	1	1	1	1	1	1	

Condition 6 – Hernia Known or Suspected

Condition	US Expertise?	Contraindications	CT Arth Hip	CT Hip w	CT Hip wo	CT Hip wwo	MR Hip w	MR Hip wo	MR wwo	MR Arth	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo	References
Hernia	Yes		1	1	1	1	1	4	1	1				3	1	1	1	1	1	1	1, 6, 7, 8
Hernia	No		1	1	1	1	1	4	1	1					1	1	1	1	1	1	
Hernia	Yes	MR	1	1	1	1	1	1	1	1				4	1	1	1	1	1	1	
Hernia	No	MR	2	2	2	2	2	2	2	2					2	2	2	2	2	2	

Condition 7 – Heterotopic Bone Known or Suspected

Condition	Contraindications	CT Arth Hip	CT Hip w	CT Hip wo	CT Hip wwo	MR Hip w	MR Hip wo	MR wwo	MR Arth	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo	References
Heterotopic Bone		1	1	4	1	1	4	1	1					1	1	1	1	1	1	15
Heterotopic Bone	MR	1	1	4	1	1	1	1	1					1	1	1	1	1	1	
Heterotopic Bone	CT	1	1	1	1	1	4	1	1					1	1	1	1	1	1	
Heterotopic Bone	MR CT	2	2	2	2	2	2	2	2					2	2	2	2	2	2	

Condition 8 – Hip Pain without Trauma

Base condition	Priors	Contraindications	CT Arth Hip	CT Hip w	CT Hip wo	CT Hip wwo	MR Hip w	MR Hip wo	MR Hip wwo	MR Arth Hip	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo	References
Hip Pain wo Trauma	No XR		1	1	1	1	1	1	1	1			4		1	1	1	1	1	1	1, 11
Hip Pain wo Trauma	XR		1	1	1	1	1	4	1	1					1	1	1	1	1	1	11
Hip Pain wo Trauma	XR	MR	2	2	2	2	2	2	2	2					2	2	2	2	2	2	11

Condition 9 – Iliopsoas Subluxation

Condition	US Expertise?	Contraindications	CT Arth Hip	CT Hip w	CT Hip wo	CT Hip wwo	MR Hip w	MR Hip wo	MR wwo	MR Arth	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo	References
Iliopsoas Subluxation	Yes		1	1	1	1	1	4	1	1				3	1	1	1	1	1	1	1, 6, 7, 8
Iliopsoas Subluxation	No		1	1	1	1	1	4	1	1					1	1	1	1	1	1	1, 6, 7, 8
Iliopsoas Subluxation	Yes	MR	1	1	1	1	1	1	1	1				4	1	1	1	1	1	1	1, 6, 7, 8
Iliopsoas Subluxation	No	MR	2	2	2	2	2	2	2	2					2	2	2	2	2	2	1, 6, 7, 8

Condition 10 – Impingement

Condition	Priors	Contraindications	CT Arth Hip	CT Hip w	CT Hip wo	CT Hip wwo	MR Hip w	MR Hip wo	MR wwo	MR Arth	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo	References
Impingement	No XR		1	1	1	1	1	1	1	1			4		1	1	1	1	1	1	1
Impingement	XR		1	1	3	1	1	4	1	4					1	1	1	1	1	1	1, 17, 18, 19
Impingement	XR	MR	4	1	4	1	1	1	1	1					1	1	1	1	1	1	1, 18, 19
Impingement	XR	CT	1	1	1	1	1	4	1	4					1	1	1	1	1	1	1, 17, 18, 19
Impingement	XR	MR, CT	2	2	2	2	2	2	2	2					2	2	2	2	2	2	LBP

Condition 11 – Infection Known or Suspected

Condition	Prior Studies	Contraindications	CT Arth Hip	CT Hip w	CT Hip wo	CT Hip wwo	MR Hip w	MR Hip wo	MR wwo	MR Arth	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo	References
Infection	No XR		1	1	1	1	1	1	1	1			4		1	1	1	1	1	1	1
Infection	XR		1	1	3	1	1	3	4	1		3			1	1	1	1	1	1	1, 2, 3, LBP
Infection	XR	GAD	1	3	3	1	1	4	1	1		3			1	1	1	1	1	1	
Infection	XR	IOD	1	1	3	1	1	3	4	1		3			1	1	1	1	1	1	
Infection	XR	MR	1	3	3	1	1	1	1	1		3			1	1	1	1	1	1	
Infection	XR	CT	1	1	1	1	1	3	4	1		3			1	1	1	1	1	1	
Infection	XR	GAD IOD	1	1	3	1	1	4	1	1		3			1	1	1	1	1	1	
Infection	XR	GAD CT	1	1	1	1	1	4	1	1		3			1	1	1	1	1	1	
Infection	XR	MR IOD	1	1	4	1	1	1	1	1		3			1	1	1	1	1	1	
Infection	XR	MR CT	2	2	2	2	2	2	2	2					2	2	2	2	2	2	

Condition 12 – Inflammatory Arthritis Known or Suspected

Condition	Priors	Contraindications	CT Arth Hip	CT Hip w	CT Hip wo	CT Hip wwo	MR Hip w	MR Hip wo	MR wwo	MR Arth	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo	References
Inflammatory Arthritis	No XR		1	1	1	1	1	1	1	1			4		1	1	1	1	1	1	14
Inflammatory Arthritis	XR		1	1	1	1	1	4	3	1					1	1	1	1	1	1	14, LBP
Inflammatory arthritis	XR	GAD	1	1	1	1	1	4	1	1					1	1	1	1	1	1	
Inflammatory arthritis	XR	MR	2	2	2	2	2	2	2	2					2	2	2	2	2	2	

Condition 13 – Lateral Femoral Cutaneous Nerve Compression

Condition	Contraindications	CT Arth Hip	CT Hip w	CT Hip wo	CT Hip wwo	MR Hip w	MR Hip wo	MR wwo	MR Arth	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo	References
Lateral Femoral Cutaneous		1	1	1	1	1	1	1	1	4				1	1	1	1	1	1	12
Lateral Femoral Cutaneous	MR	2	2	2	2	2	2	2	2					2	2	2	2	2	2	LBP

Condition 14 – Mass Known or Suspected

Condition	Priors	Contraindications	CT Arth Hip	CT Hip w	CT Hip wo	CT Hip wwo	MR Hip w	MR Hip wo	MR wwo	MR Arth	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo	References
Mass	No XR		1	1	1	1	1	1	1	1			4		1	1	1	1	1	1	1
Mass	XR		1	1	3	1	1	3	4	1		3			1	1	1	1	1	1	1, 2, 3, LBP
Mass	XR	GAD	1	3	3	1	1	4	1	1		3			1	1	1	1	1	1	
Mass	XR	IOD	1	1	3	1	1	3	4	1		3			1	1	1	1	1	1	
Mass	XR	MR	1	3	3	1	1	1	1	1		3			1	1	1	1	1	1	
Mass	XR	CT	1	1	1	1	1	3	4	1		3			1	1	1	1	1	1	
Mass	XR	GAD IOD	1	1	3	1	1	4	1	1		3			1	1	1	1	1	1	
Mass	XR	GAD CT	1	1	1	1	1	4	1	1		3			1	1	1	1	1	1	
Mass	XR	MR IOD	1	1	4	1	1	1	1	1		3			1	1	1	1	1	1	
Mass	XR	MR CT	2	2	2	2	2	2	2	2					2	2	2	2	2	2	

Condition 15 - Muscle Tendon Disorder

Condition	US Expertise?	Contraindications	CT Arth Hip	CT Hip w	CT Hip wo	CT Hip wwo	MR Hip w	MR Hip wo	MR wwo	MR Arth	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo	References
Muscle Tendon Disorder	Yes		1	1	1	1	1	4	1	1				3	1	1	1	1	1	1	1, 6, 7, 8
Muscle Tendon Disorder	No		1	1	1	1	1	4	1	1					1	1	1	1	1	1	
Muscle Tendon Disorder	Yes	MR	1	1	1	1	1	1	1	1				4	1	1	1	1	1	1	
Muscle Tendon Disorder	No	MR	2	2	2	2	2	2	2	2					2	2	2	2	2	2	

Condition 16 - Osteoarthritis Known or Suspected - Hip

Condition	Priors	Contraindications	CT Arth Hip	CT Hip w	CT Hip wo	CT Hip wwo	MR Hip w	MR Hip wo	MR wwo	MR Arth	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo	References
Osteoarthritis	No XR		1	1	1	1	1	1	1	1			4		1	1	1	1	1	1	1
Osteoarthritis, Fracture and/or Surgical Candidate	XR		1	1	4	1	1	4	1	1					1	1	1	1	1	1	13, 14
Osteoarthritis, Fracture and/or Surgical Candidate	XR	MR	1	1	4	1	1	1	1	1					1	1	1	1	1	1	13, 14
Osteoarthritis, Fracture and/or Surgical Candidate	XR	CT	1	1	1	1	1	4	1	1					1	1	1	1	1	1	LBP
Osteoarthritis, Fracture and/or Surgical Candidate	XR	MR, CT	2	2	2	2	2	2	2	2					2	2	2	2	2	2	LBP
Osteoarthritis, No Fracture and/or Surgical Candidate	XR		1	1	1	1	1	1	1	1					1	1	1	1	1	1	LBP

Condition 17 – Piriformis Syndrome - Sciatic Nerve Irritation

Condition	Contraindications	CT Arth Hip	CT Hip w	CT Hip wo	CT Hip wwo	MR Hip w	MR Hip wo	MR wwo	MR Arth	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo	References
Piriformis Sciatica		1	1	1	1	1	1	1	1	4				1	1	1	1	1	1	12
Piriformis Sciatica	MR	2	2	2	2	2	2	2	2					2	2	2	2	2	2	LBP

Condition 18 – Post-Fracture Healing Assessment

Condition	Priors	Contraindications	CT Arth Hip	CT Hip w	CT Hip wo	CT Hip wwo	MR Hip w	MR Hip wo	MR wwo	MR Arth	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo	References
Post-Fracture Healing	No XR		1	1	1	1	1	1	1	1			4		1	1	1	1	1	1	13
Post-Fracture Healing	XR		1	1	4	1	1	1	1	1					1	1	1	1	1	1	
Post-Fracture Healing	XR	CT	2	2	2	2	2	2	2	2					2	2	2	2	2	2	

Condition 19 – Preoperative – Known Fracture

Condition	Contraindications	CT Arth Hip	CT Hip w	CT Hip wo	CT Hip wwo	MR Hip w	MR Hip wo	MR wwo	MR Arth	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo	References
Preop-Fracture		1	1	4	1	1	4	1	1					1	1	1	1	1	1	LBP
Preop-Fracture	MR	1	1	4	1	1	1	1	1					1	1	1	1	1	1	
Preop-Fracture	CT	1	1	1	1	1	4	1	1					1	1	1	1	1	1	
Preop-Fracture	MR CT	2	2	2	2	2	2	2	2					2	2	2	2	2	2	

Condition 20 - Soft Tissue Injury - Hip

Condition	US Expertise?	Contraindications	CT Arth Hip	CT Hip w	CT Hip wo	CT Hip wwo	MR Hip w	MR Hip wo	MR wwo	MR Arth	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo	References
Soft Tissue Injury	Yes		1	1	1	1	1	4	1	1				3	1	1	1	1	1	1	1, 6, 7, 8
Soft Tissue Injury	No		1	1	1	1	1	4	1	1					1	1	1	1	1	1	
Soft Tissue Injury	Yes	MR	1	1	1	1	1	1	1	1				4	1	1	1	1	1	1	
Soft Tissue Injury	No	MR	2	2	2	2	2	2	2	2					2	2	2	2	2	2	

Condition 21 – Hip Tendon Repair - Status Post

Condition	Contraindications	CT Arth Hip	CT Hip w	CT Hip wo	CT Hip wwo	MR Hip w	MR Hip wo	MR wwo	MR Arth	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo	References
Hip Tendon Repair		1	1	4	1	1	1	1	1					1	1	1	1	1	1	LBP
Hip Tendon Repair	CT	2	2	2	2	2	2	2	2					2	2	2	2	2	2	

Condition 22 – Traumatic Hip Pain – Fracture Known or Suspected

Condition	Priors	Contraindications	CT Arth Hip	CT Hip w	CT Hip wo	CT Hip wwo	MR Hip w	MR Hip wo	MR wwo	MR Arth	MR L-plex	NM Bone Scan	XR Hip	US Hip	CT Pelvis w	CT Pelvis wo	CT Pelvis wwo	MR Pelvis w	MR Pelvis wo	MR Pelvis wwo	References
Hip Trauma Known or Suspected Fracture	No XR		1	1	1	1	1	1	1	1			4		1	1	1	1	1	1	1
Hip Trauma Known or Suspected Fracture	XR		1	1	3	1	1	4	1	1					1	1	1	1	1	1	1, 20, 21
Hip Trauma Known or Suspected Fracture	XR	MR	1	1	4	1	1	1	1	1					1	1	1	1	1	1	20, LBP
Hip Trauma Known or Suspected Fracture	XR	CT	1	1	1	1	1	4	1	1					1	1	1	1	1	1	
Hip Trauma Known or Suspected Fracture	XR	MR CT	2	2	2	2	2	2	2	2					2	2	2	2	2	2	

Sources

The Hip Pain AUC has been developed by Weill Cornell Medicine utilizing the following twenty-one published sources.

No.	Source
1	Strategy and optimization of diagnostic imaging in painful hip in adults, Orthop Traumatol Surg Res. 2015 Feb, A. Blum, A. Raymond , P. Teixeira https://www.ncbi.nlm.nih.gov/pubmed/25599865
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3	MR Imaging of Hip Infection and Inflammation, MRI Clinics February 2013, Luke Maj, MD, MHA, Yuliya Gombar III, MS, William B. Morrison, MD, https://www.mri.theclinics.com/article/S1064-9689(12)00113-4/abstract
4	Imaging of the Acetabular Labrum, Semin Musculoskelet Radiol. 2013 Jul, James D. Thomas, MBBS, FRCR Zhi Li, BS, Anne M. Agur, PhD, Philip Robinson, MB, ChB, FRCR, https://www.ncbi.nlm.nih.gov/pubmed/23787979
5	Magnetic Resonance Imaging of Acetabular Labral Tears, J Bone Joint Surg Am. 2011 May, Kawan S. Rakhra MD, FRCPC https://www.ncbi.nlm.nih.gov/pubmed/21543685
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