

**American College of Radiology  
ACR Appropriateness Criteria®**

**Osteonecrosis of the Hip**

**Variant 1: Adult or Child. Clinically suspected osteonecrosis. First study.**

Procedure	Appropriateness Category	SOE	Adults RRL	Peds RRL	Rating	Median	Final Tabulations								
							1	2	3	4	5	6	7	8	9
Radiography pelvis and hips	Usually appropriate		⊕⊕⊕ 1-10 mSv	⊕⊕⊕⊕ 3-10 mSv [ped]	9	n/a	0	0	0	0	0	0	0	0	0
CT hips with IV contrast	Usually not appropriate		⊕⊕⊕ 1-10 mSv	⊕⊕⊕⊕ 3-10 mSv [ped]	1	n/a	0	0	0	0	0	0	0	0	0
CT hips without IV contrast	Usually not appropriate		⊕⊕⊕ 1-10 mSv	⊕⊕⊕⊕ 3-10 mSv [ped]	1	n/a	0	0	0	0	0	0	0	0	0
CT hips without and with IV contrast	Usually not appropriate		⊕⊕⊕⊕ 10-30 mSv	⊕⊕⊕⊕⊕ 10-30 mSv [ped]	1	n/a	0	0	0	0	0	0	0	0	0
MRI hips without IV contrast	Usually not appropriate		○ 0 mSv	○ 0 mSv [ped]	1	n/a	0	0	0	0	0	0	0	0	0
MRI hips without and with IV contrast	Usually not appropriate		○ 0 mSv	○ 0 mSv [ped]	1	n/a	0	0	0	0	0	0	0	0	0
Tc-99m bone scan with SPECT hips	Usually not appropriate		⊕⊕⊕ 1-10 mSv	⊕⊕⊕⊕ 3-10 mSv [ped]	1	n/a	0	0	0	0	0	0	0	0	0

**Variant 2: Adult. Clinically suspected osteonecrosis. Normal radiographs or radiographs that show femoral head lucencies suspicious for osteonecrosis.**









## **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](http://www.acr.org/ac).