American College of Radiology  
ACR Appropriateness Criteria®  

Acutely Limping Child Up To Age 5

Variant 1:  Child up to age 5. Acute limp. Nonlocalized symptoms. No concern for infection. Initial imaging.

<table>
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<tr>
<th>Procedure</th>
<th>Appropriateness Category</th>
<th>SOE</th>
<th>Adults RRL</th>
<th>Peds RRL</th>
<th>Rating</th>
<th>Median</th>
<th>Final Tabulations</th>
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</table>
| Radiography tibia/fibula | Usually appropriate      | Limited        | ✧ <0.1 mSv    | ✧ <0.03 mSv   | 9      | 9      | 0 0 0 0 1 2 5 8  
| References         | Study Quality            |                |               |               |        |        |                   |
| 9 (16493917)       | 4                        |                |               |               |        |        |                   |
| 10 (1732293)       | 2                        |                |               |               |        |        |                   |
| 11 (1740701)       | 4                        |                |               |               |        |        |                   |
| 12 (9084078)       | 4                        |                |               |               |        |        |                   |
| 13 (18316353)      | 3                        |                |               |               |        |        |                   |

Radiography foot  
May be appropriate (Disagreement)  

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Study Quality  

9 (16493917)  4  
10 (1732293)  2  
11 (1740701)  4  
12 (9084078)  4  
13 (18316353) 3  

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### MRI lower extremity without IV contrast

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### MRI lower extremity without and with IV contrast

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References

- 12 (9084078)
- 26 (26554284)
- 27 (11242240)
- 28 (2898538)
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### CT lower extremity area of interest without and with IV contrast

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### MRI lower extremity area of interest without and with IV contrast

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### Tc-99m 3-phase bone scan whole-body

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**Variant 3:** Child up to age 5. Acute limp. Nonlocalized symptoms. Concern for infection. Initial imaging.
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**MRI whole body without and with IV contrast**

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**MRI whole body without IV contrast**

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**Radiography lumbar spine**

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<td>US lower extremity</td>
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References:

- Study Quality:
  - 1: Low quality
  - 2: Moderate quality
  - 3: High quality
  - 4: Excellent quality

- References:
  - 1: 39 (18560822)
  - 2: 40 (17314640)

Note: ☢☢☢☢ indicates a high radiation dose range from 3-10 mSv.
CT lower extremity without and with IV contrast

<table>
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<tr>
<th>Procedure</th>
<th>Appropriateness Category</th>
<th>Expert Consensus</th>
<th>Adults RRL</th>
<th>Peds RRL</th>
<th>Rating</th>
<th>Median</th>
<th>Final Tabulations</th>
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Variant 4: Child up to age 5. Acute limp. Symptoms localized to the hip. Concern for infection. Initial imaging.

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| MRI pelvis without and with IV contrast| Usually appropriate      | Limited   | 0 mSv     | 0 mSv [ped]  | 8      | 8      | 1 0 0 0 0 1 5 6 3|

References

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References:
- 40 (17314640)
- 41 (19858750)
- 50 (19380545)
- 51 (20180105)
- 56 (28170361)
- 67 (26001240)
- 68 (12368368)
- 69 (21129563)
- 70 (22268189)
- 71 (17019590)

- 58 (6739205)
- 63 (17127204)
- 64 (20567730)
- 65 (16264122)
- 66 (18690452)
### Radiography lumbar spine

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### CT pelvis without IV contrast

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### CT pelvis without and with IV contrast

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### Variant 5: Child up to age 5. Acute limp. Symptoms localized to lower extremity (not pelvis or hips). Concern for infection. Initial imaging.

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**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).