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

**Suspected Spine Infection**

**Variant 1:** Suspected spine infection (such as epidural abscess or discitis osteomyelitis), with new or worsening back or neck pain, with or without fever, who may have one or more of the following red flags (diabetes mellitus, IV drug use, cancer, HIV, or dialysis) or abnormal lab values. Initial imaging.

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Variant 2: Suspected spine infection (such as epidural abscess or discitis osteomyelitis), with recent intervention (such as surgery with or without hardware, pain injection, or stimulator implantation). Initial imaging.

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<p>| CT spine area of interest with IV contrast | May be appropriate | Strong |Varies |Varies | 6 |6 | 0 |1|0|0|7|6|3|3|1|
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| MRI spine area of interest with IV contrast          | Usually not appropriate | Strong | O 0 mSv | O 0 mSv [ped] | 2 | 2 | 11 | 4 | 7 | 0 | 0 | 0 | 0 | 0 |
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| References                                           | Study Quality           |        |         |               |   |   |    |   |   |   |   |   |   |   |   |
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| 14 (25296275)                                        | 4                       |        |         |               |   |   |    |   |   |   |   |   |   |   |   |
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**WBC scan and sulfur colloid scan complete spine**

Usually not appropriate

Limited

10-30 mSv

2

2

10 3 5 0 1 0 1 0 1

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31 (29452617)

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**Variant 3:** Suspected spine infection (such as epidural abscess or discitis osteomyelitis), with new neurologic deficit or cauda equina syndrome. Initial imaging.

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Variant 4: Suspected spine infection (such as epidural abscess or discitis osteomyelitis), with decubitus ulcer or wound overlying spine. Initial imaging.
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Variant 5: Suspected spine infection (such as epidural abscess or discitis osteomyelitis). Abnormal radiographs or CT findings. Next imaging study.
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3-phase bone scan complete spine

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MRI spine area of interest with IV contrast

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WBC scan and sulfur colloid scan complete spine

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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).