American College of Radiology  
ACR Appropriateness Criteria®  

Management of Vertebral Compression Fractures  

Variant 1: New symptomatic vertebral compression fracture (VCF) identified on radiographs. No known malignancy. Next imaging study.  

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**Image-guided biopsy spine area of interest**

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**SPECT or SPECT/CT spine area of interest**

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*☢☢☢ 1-10 mSv*

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**Expert Consensus**

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Variant 3: New back pain. Previously treated VCF or multiple VCFs. Initial Imaging.
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Variant 8: Benign VCF with worsening pain, deformity, or pulmonary dysfunction. Initial treatment.
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### Variant 9: Pathological VCF with ongoing or increasing mechanical pain. Initial treatment.

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**Percutaneous ablation spine**

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**Systemic radionuclide therapy**

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**Variant 9: Pathological VCF with ongoing or increasing mechanical pain. Initial treatment.**

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Systemic radionuclide therapy may be appropriate.
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.