

Transverse and Spinous Process Fractures

Background:

The majority of transverse process (TP) and spinous process (SP) fractures are structurally and neurologically stable injuries, which do not require spine service intervention. However there are some features which can be more worrisome for associated spinal cord and/or ligamentous involvement. Transverse process fractures are defined as those involving the transverse process only, **without** extension into the pedicle, lamina, or facet complex. The spinous process **serves to attach muscles and ligaments**, which are therefore at risk for injury in the presence of an SP fracture. We sought to create inclusion criteria to ensure that consistent spine consultation is obtained for the most high risk of these generally low-risk, stable fractures.

Guidelines for medical decision-making:

Trauma patients will receive imaging per usual protocol at the discretion of the treating team. TP and/or SP fractures may be identified on CT scan. If present, the following are indications for a spine consult:

- 4 or more contiguous TP fractures / SP fractures
- Bilateral TP fractures / SP fractures (regardless of the # of fractures)
- All C-spine TP fractures / SP fractures

Additionally, Spine consultation is required for ANY fracture (including TP and SP) when a concern for ligamentous injury exists.

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References:

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