# Flexion Tear Drop Fracture

- On x-rays the facet joints and interspinous distances are usually widened and the disk space may be narrowed.
- 70% of patients have neurologic deficit.
- It is an unstable fracture associated with complete disruption of ligaments and anterior cord syndrome.

# Flexion Tear Drop Fracture

- Most severe injury of the cervical spine.
- Results from severe flexion force (head-on collisions in motor vehicles) and often presents with quadriplegia and loss of anterior column sensation.
- The involved vertebral body is posteriorly distracted relative to the teardrop fragment which remains attached to the anterior longitudinal ligament.
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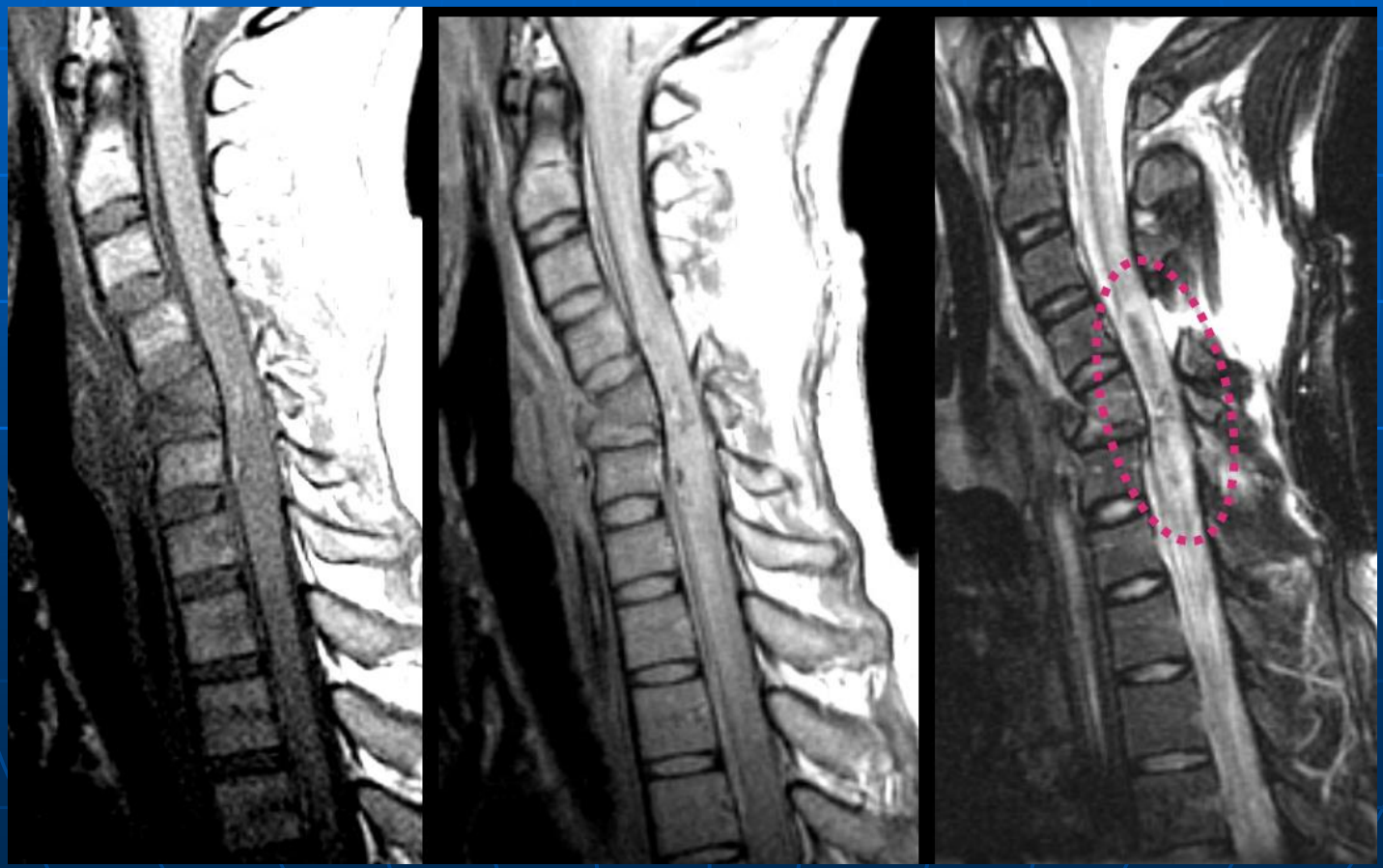
# Flexion Tear Drop Fracture

# Flexion Teardrop & Hemorrhagic SCI

- Hemorrhage has worse outcome.



# Mechanism of Teardrop

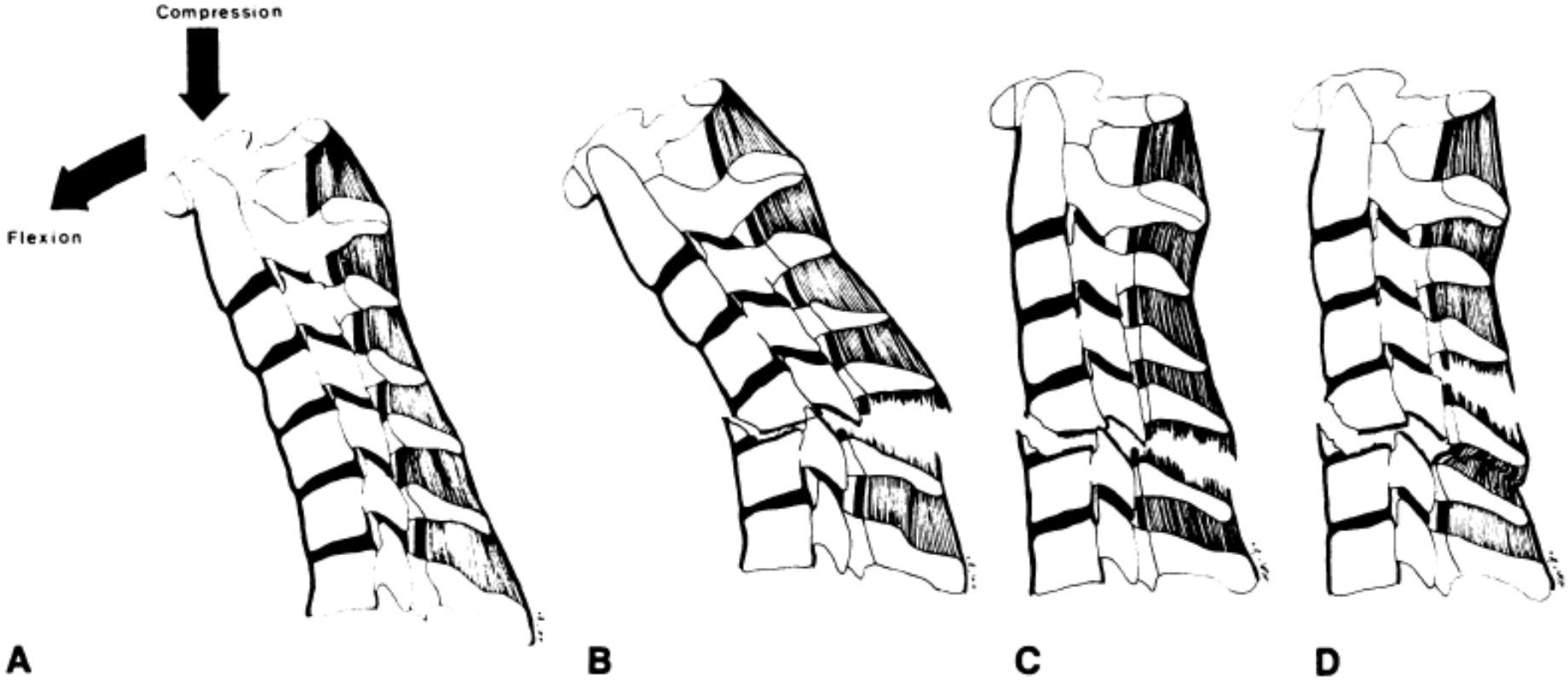



Fig. 7.—*A* and *B*, Diagrams show mechanism of flexion teardrop fracture (*A*) and resultant deformity (*B*).

*C*, Drawing shows altered deformity after traction tongs have been applied. Alignment is improved with reduction of both the kyphotic angulation and the posterior displacement of upper column. However, some degree of posterior displacement of posterior fragment of fractured body and posterior offset of spinolaminar line of upper column often persists. Distraction force may cause widening of disk space, facet joint, and interlaminar and interspinous spaces between the level of injury and the one below.

*D*, Variation of *C*. In some cases of bilaminar fracture at the level of injury, the interlaminar and interspinous spaces between the level of injury and the one below are paradoxically narrowed due to downward displacement of fractured laminae. Interlaminar and interspinous spaces above are widened with torn ligamentum flavum and interspinous ligament.