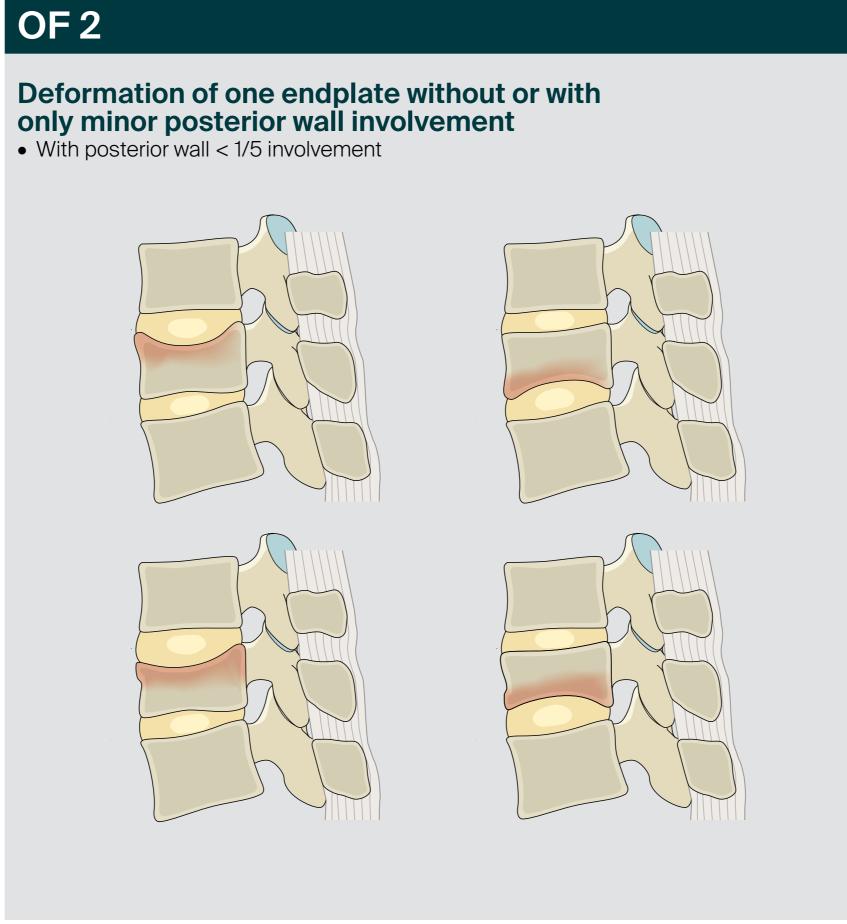
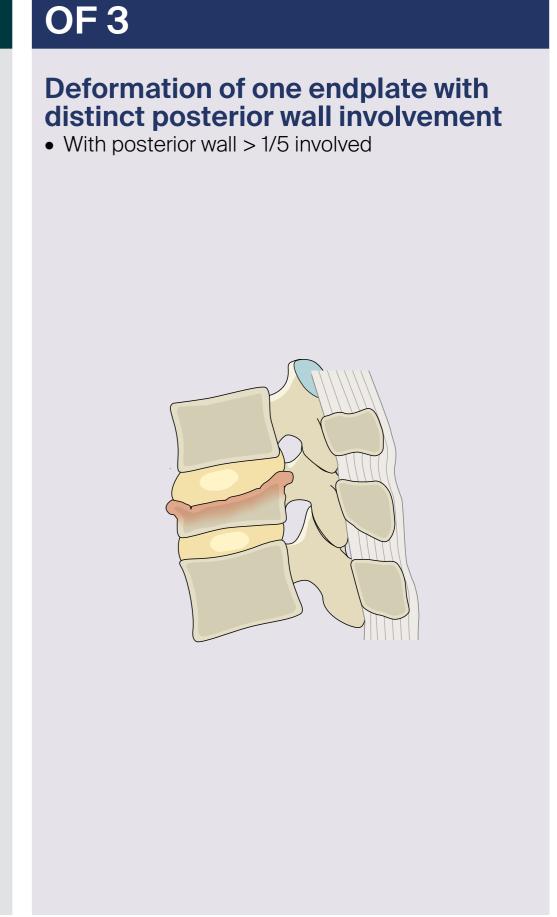
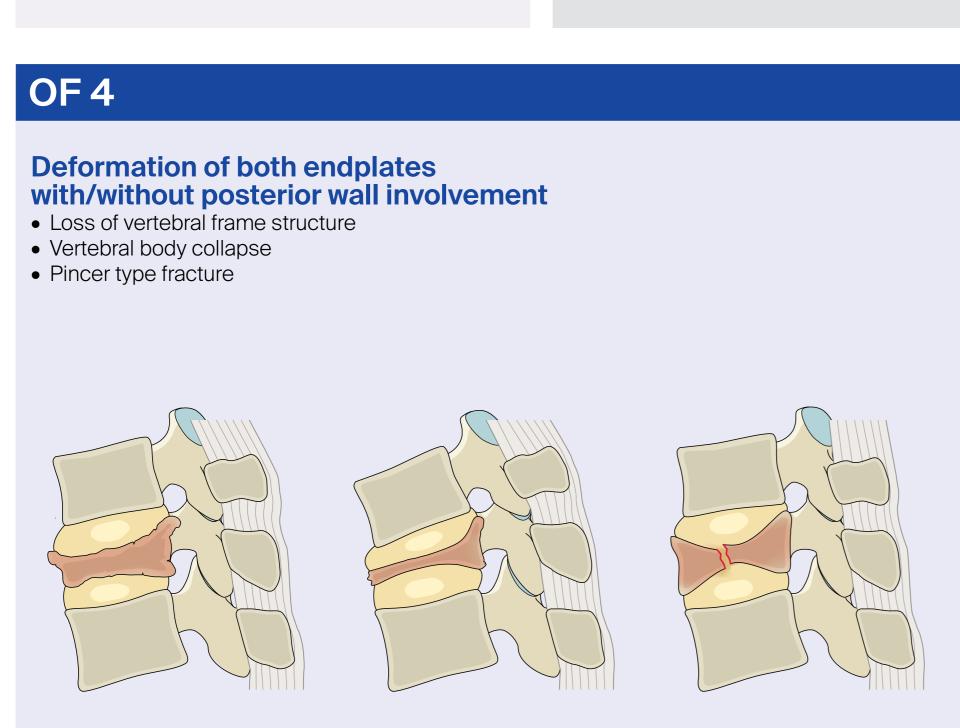


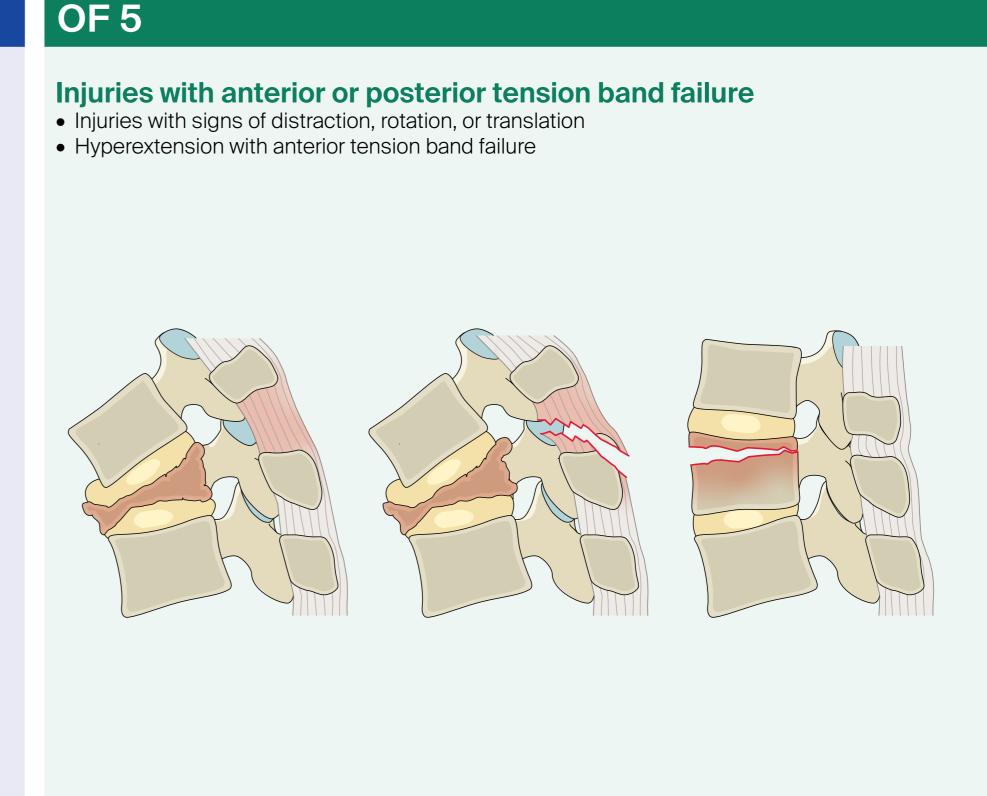
AO Spine—DGOU Osteoporotic Fracture (OF) Classification System

No deformation (vertebral body edema in MRI-STIR) • Typically not visible on x-rays: chance to find on MRI









Algorithm for morphologic classification **START→** Failure of anterior/posterior tension band? OF 5 →YES→ NO Deformity of both endplates with/without posterior wall involvement? OF4 → YES → NO Deformity of one endplate? → YES → Distinct posterior wall involvement? → YES → OF3 OF 2 NO OF1 Vertebral body edema? → YES → No injury

Modified score for therapeutic decision making in OF* Parameter Grade Points

Parameter	Grade	Points
Morphology (OF 1-5)	1–5	2–10
Severity of Osteoporosis	T-Score <-3 or qCT: HU ≤90	1
Deformity Progression	Yes, No	1, -1
Pain (under analgesia)**	VAS ≥ 5, < 5	1, -1
Neurological Symptoms (N2-N4)	Yes	2
Mobilisation (under analgesia)	No, Yes	1, -1
Health Status	ASA > 3, ***mFl > 2, Anticoagulation	Each -1, Maximum -2

O points if a parameter is unknown or not determinable;

- 0–5 points = Conservative therapy;
- 6 points = Conservative therapy or surgery; > 6 points = Surgery.
- * The severity score system has not been validated yet and should be used as a reference only.
- ** According to step II WHO pain ladder.
- *** 5-item modified frailty index (mFI) = COPD, or recent pneumonia; Congestive heart failure; Functional status (not independent); Hypertension requiring medication; Diabetes mellitus.