

Abnormal Vertebral Bodies



Limbus Vertebra

Well-corticated anterior/superior defect, usually in lumbar spine.

Hurler Syndrome

Anterior/Inferior VB beaking. Also thoracolumbar kyphosis/gibbous, atlantoaxial subluxation, narrow foramen magnum, etc.

Morquio Syndrome

Anterior/central VB breaking. Also hypoplasia of odontoid peg, os odontioideum, round VBs, etc.

Hemivertebra

Aplasia of half of the FB. Common cause of congenital scoliosis.

Scheuermann Disease

VB epiphysitis/juvenile kyphosis. Anterior wedging & DS narrowing, waxy endplates. Type I (T-spine), Type II (T&L). Sorenson Criteria (kyphosis & wedging).

Sickle Cell

H-shaped VBs. Also tower VBs, vanishing VBs, and anterior vertebral vascular notches.

Neurofibromatosis Type I

Vertebral scalloping, may be associated with dural ecstasia or neurofibromas.

Osteopetrosis (AD)

Sclerotic, thick, bone-within-bone appearance or sandwich VB appearance.

Hyperparathyroidism

Rugger jersey. Excess osteoid at endplates without hydroxyapatite.

Paget Disease

Picture frame VBs.



Hemangioma

Vertically-oriented trabecular/corduroy pattern. May also have "honeycomb" pattern.

Ankylosing Spondylitis

Squaring of VBs. Also Romanus lesion (shiny corner), syndesmophytes (bamboo spine), etc.

Ivory Vertebra

Lymphoma, osteosarcoma, osteo/neuro/medullo-blastomas, osteoblastic mets, SAPHO

Sclerotic Mets

Max HU < 1060. Prostate, breast TCC, carcinoid, medullo/neuroblastomas, mucinous GI Ca, etc.

Bone Islands/Enostosis

Max HU >> 1060. Speculated margins. Usually < 1 cm.

Vertebra Plana

Pancake/silver dollar VB. LCH (single level), lymphoma (multiple levels), OI, MM, trauma, TB.

Compression Fracture

Genant Grading: 0 (normal), 1 (<25% height loss), 2 (35-40%), 3 (>40%)

Anterior Compression Fx

Hyperflexion injury from axial loading.

Schmorl Node

Osteoporosis

Biconcave VBs. Also VB pencilling, ghost VBs, vertebra plana.

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