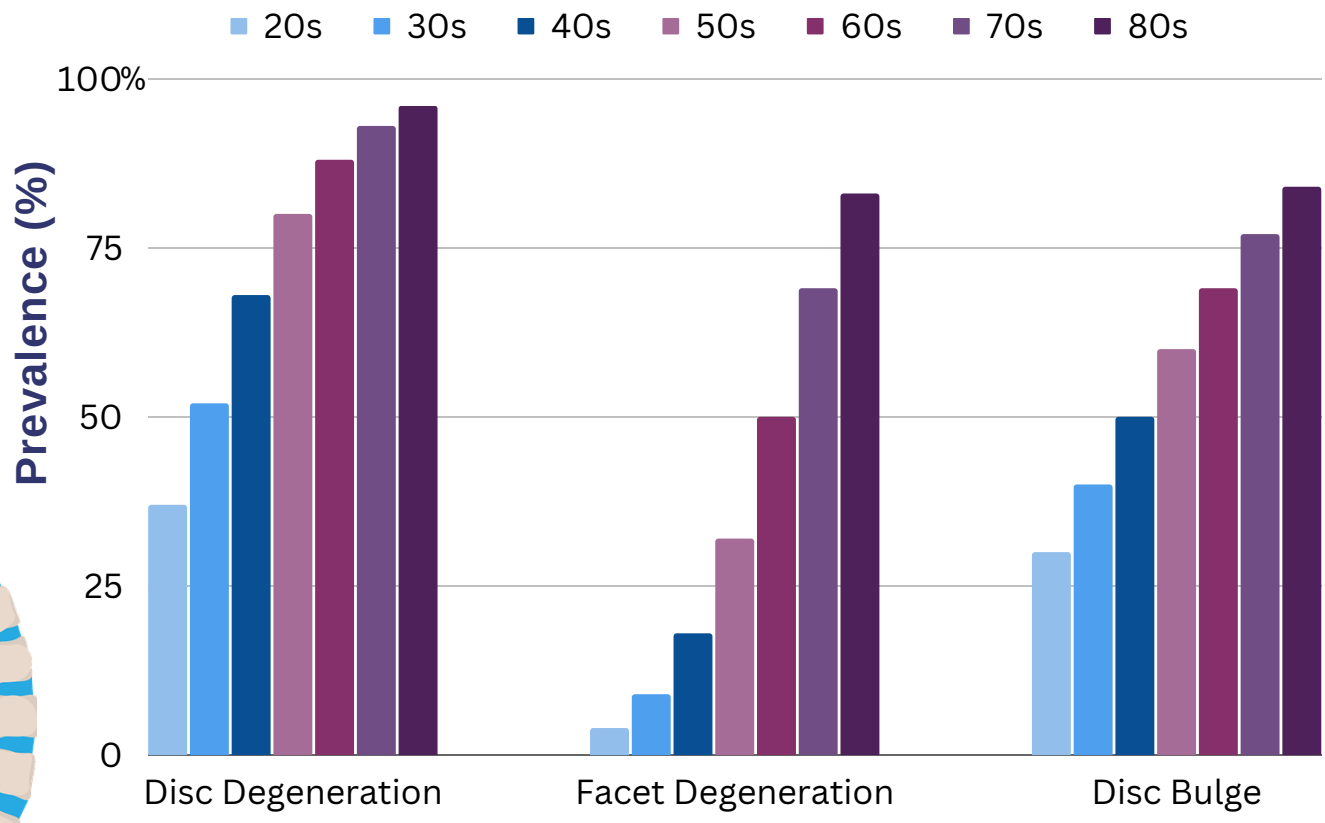
NORMATIVE FINDINGS

SPINE PATHOLOGY

Clinician Resource

Anatomical abnormalities have been identified in both symptomatic and asymptomatic populations.[1-2] Providing education when necessary can help reframe how the patient views their pain and dysfunction.[3]

Age-Normative Data for Asymptomatic Individuals[1]



Symptomatic Populations

Presence of these findings should still be considered with caution and patients can progress even if imaging does not.[3]

In decreasing-odds order[2]

- Disc Bulge
- Spondylolysis
- Disc Extrusion
- Modic 1 changes
- Disc protrusion
- Disc Degeneration

Under the age of 50, certain imaging findings might be more prevalent in symptomatic individuals (compared to asymptomatic).[2]

⚠ Keep in mind: Symptomatic individuals may have more yellow flags and psychosocial risk factors.[6]

Sarah McClellen, SPT

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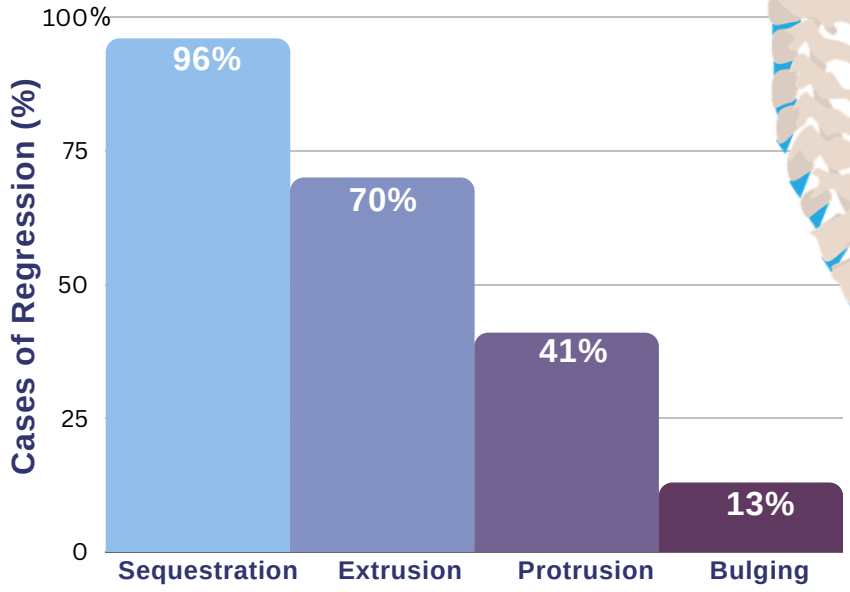
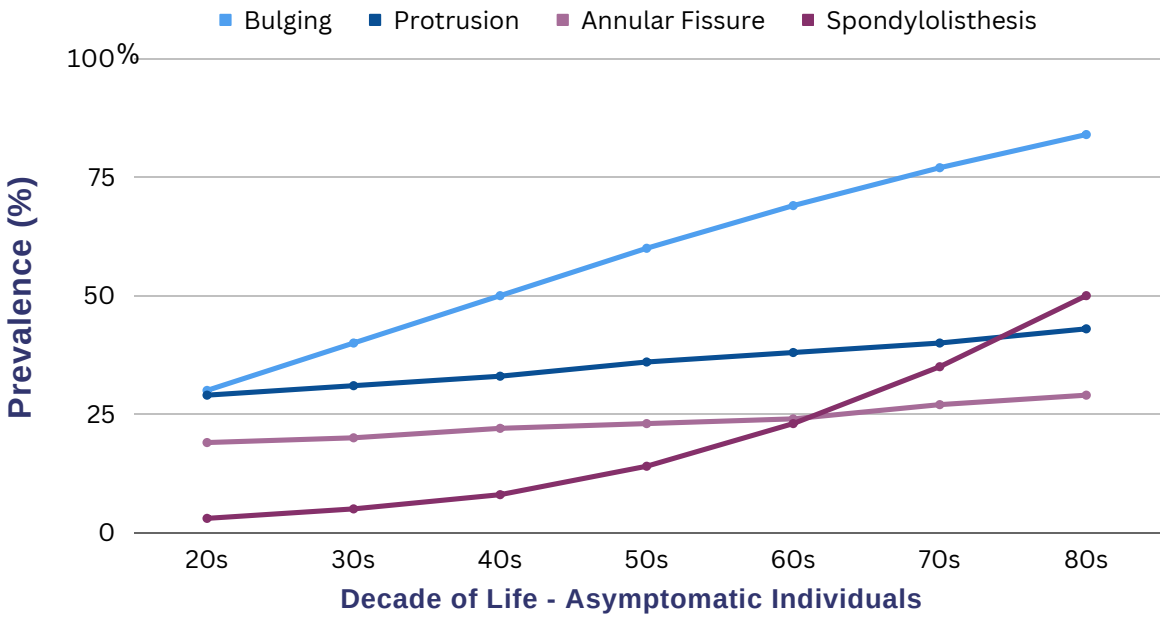
Regression of Disc Pathology

High-quality literature review reveals that a large percentage of disc pathology will show partial, if not full, spontaneous regression within 1 year, and as early as 2 months.[8]

Regression might be lower in less severe pathologies due to the "normality" of these findings.[1-2,8]



Presence of Disc Pathology by Decade in Asymptomatic Populations



Clinical Implications

- The presence of asymptomatic anatomical abnormalities increases with age [1-2,4]
- Pathologic findings do not always indicate source of pain. Clinical outcomes can improve even without change in imaging.[1-3,7]
- Clinicians should consider the entire biopsychosocial being when educating about imaging and pain.[3,7,9-10]

Sarah McClellen, SPT

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