

Degenerative scoliosis

One of the main differentiating features from juvenile scoliosis is that in degenerative scoliosis, the disc spaces are asymmetrically narrowed in the coronal plane and the vertebral bodies tend to maintain a more normal configuration.

see [Adult Degenerative scoliosis](#).

Risk factors

The risk of developing DSD is multifactorial and includes:

1. ★ the most powerful determinant in developing DSD in a study of twins was the genetic influence, and possibly other unidentified factors ¹⁾. Environmental factors studied (including sedentary vs. active lifestyles, occupation, cigarette smoking...) exerted only a modest influence, which may explain why conflicting findings for these have been reported
2. cumulative effects of microtrauma and macro trauma to the spine
3. [osteoporosis](#)
4. cigarette smoking: several epidemiologic studies have shown that the incidence of back pain, sciatica and spinal degenerative disease is higher among cigarette smokers than among non-smokers ^{2) 3)}
5. in the lumbar spine:
 - a) stresses on the spine including effects of excess body weight
 - b) loss of muscle tone (primarily abdominals and paraspinal) resulting in increased dependence on the bony spine for structural support

Associated conditions

1. congenital:
 - a) [achondroplasia](#)
 - b) congenitally narrowed canal (AKA "short pedicle syndrome")
2. acquired:
 - a) spondylolisthesis
 - b) acromegaly
 - c) posttraumatic

d) Paget's disease

e) ankylosing spondylitis

f) ossification of the ligamentum flavum: more common in East Asians, rare in Caucasians.

Often, but not always, associated with OPLL

¹⁾

Battie MC, Videman T, Gibbons LE, et al. 1995 Volvo Award in clinical sciences: determinants of lumbar disc degeneration. A study relating lifetime exposures and magnetic resonance imaging findings in identical twins. *Spine*. 1995; 20:2601-2612

²⁾

Hadley MN, Reddy SV. Smoking and the Human Vertebral Column: A Review of the Impact of Cigarette Use on Vertebral Bone Metabolism and Spinal Fusion. *Neurosurgery*. 1997; 41:116-124

³⁾

Fogelholm RR, Alho AV. Smoking and intervertebral disc degeneration. *Med Hypotheses*. 2001; 56:537- 539

From:

<https://neurosurgerywiki.com/wiki/> - **Neurosurgery Wiki**

Permanent link:

https://neurosurgerywiki.com/wiki/doku.php?id=degenerative_scoliosis

Last update: **2024/06/07 02:55**

