

Plain lumbosacral x-rays

see also [Standing full-spine X-ray](#)

Unexpected findings occurred in only 1 in 2500 adults < 50 years age ¹⁾. Diagnosis of surgical conditions of [lumbar disc herniation](#) and [lumbar spinal stenosis](#) cannot be made from plain films (although they may be inferred, further study would be required). Various congenital abnormalities of uncertain significance may be identified (e.g. [spina bifida occulta](#)), and evidence of degenerative changes (including [osteophytes](#)) are as frequent in symptomatic as in asymptomatic patients. Gonadal radiation is significant. Seldom indicated during [pregnancy](#).

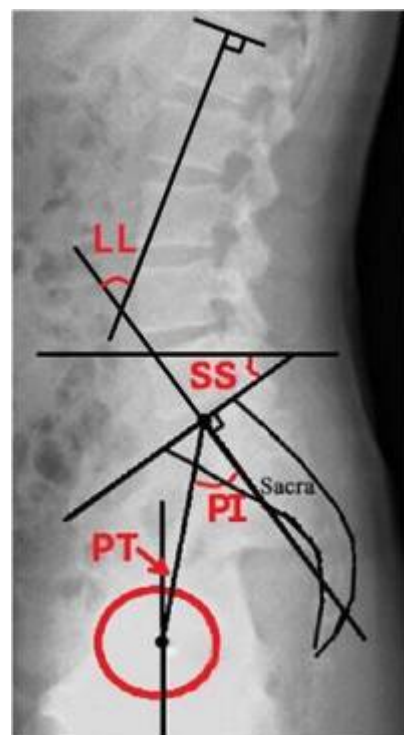
Recommendation

Not recommended for routine evaluation of patients with acute [low back](#) problems during the first month of symptoms unless a “[red flag](#)” is present. Reserve LS x-rays for patients with a likelihood of having spinal malignancy, infection, inflammatory [spondylitis](#), or clinically significant fracture. In these cases, plain x-rays are often just a starting point, and further study (CT, [Lumbar MRI](#)...) may be indicated even if the plain x-rays are normal.

see “[Red flags](#)” for these conditions.

When spine x-rays are indicated, AP and lateral views are usually adequate ²⁾. Obliques and conedown L5-S1 views more than double the radiation exposure, and add information in only 4-8% of cases, ³⁾ and can be obtained in specific instances where warranted (e.g. to diagnose [spondylolysis](#) when spondylolisthesis is found on the lateral film).

Abnormal curves of the spine



Abnormal wear on the cartilage and bones of the lower spine, such as bone spurs and narrowing of the joints between the vertebrae
Cancer (although cancer often cannot be seen on this type of x-ray)
Fractures
Signs of thinning bones (osteoporosis)
Spondylolisthesis, in which a bone (vertebra) in the lower part of the spine slips out of the proper position onto the bone below it.

see [Cobb angle](#)

see [Lumbar lordosis](#)

see [Pelvic incidence](#)

see [Pelvic tilt](#)

see [Sacral slope](#).

References

¹⁾

Nachemson AL. The Lumbar Spine: An Orthopedic Challenge. Spine. 1976; 1:59-71

²⁾

World Health Organization. A Rational Approach to Radiodiagnostic Investigations. 1983

³⁾

Scavone JG, Latschaw RF, Rohrer GV. Use of Lumbar Spine Films: Statistical Evaluation of a University Teaching Hospital. JAMA. 1981; 246:1105-1108

From:

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

Permanent link:

https://neurosurgerywiki.com/wiki/doku.php?id=plain_lumbosacral_x-rays

Last update: **2025/02/27 12:53**

