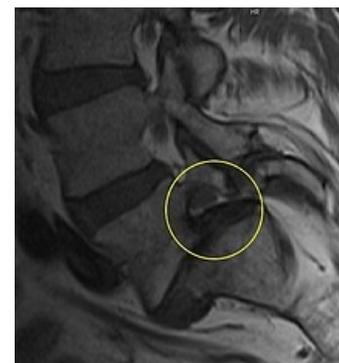


# Spondylolisthesis

**Spondylolisthesis** (**olisthesis** = displacement, slippage) is a sagittal displacement of a vertebra forward in relation to the adjacent, lower one. It occurs most often in the lumbosacral region of the spine. The cause is impaired development (ossification) of the arch, or permanent micro-traumatization and subsequent disruption of the isthmus – **spondylolysis** – so-called **isthmic spondylolisthesis** (most often L5–S1), or as a result of instability in older patients – **degenerative spondylolisthesis**, typically L4–5, and rarely trauma, inflammation or tumor.

## Clinical picture

- pain in the lumbar region;
- propagation of pain to the buttocks and lower limbs (hip joints, outer and inner thighs);
- root irritation; radicular and pseudoradicular irritation
- neurogenic claudication;
- momentum limitation.



MRI Spondylolisthesis

## Diagnostics

- history, clinical picture;
- palpation;
- a characteristic image on a radiograph. Size of displacement: expressed in % displacement of the 1st vertebra compared to the 2nd on the lateral X-ray image, grade **I-IV**;
- dynamic X-ray image (in forward and backward tilt);
- addition: MR, CT event. PMG.



Spondylolisthesis of the lumbar region on the skiagram

## Therapy

1. **Conservative;**
  - medical rehabilitation for muscle strengthening;
  - orthopedic aids (corset).
2. **Surgical;**
  - indication: long-term failure of conservative therapy, development of neurological deficit due to narrowing of the spinal canal or progression of vertebral slippage
  - procedures combining decompression of the spinal canal with subsequent vertebra reduction + stabilization (spondylodesis)

## Links

### Related articles

- Lower back pain, Lumbago
- Lumbar intervertebral disc herniation
- Lumbar spinal canal stenosis
- Syndroma caudae equinae

### References

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- VOKURKA, Martin. *Velký lékařský slovník*. 7. edition. Maxdorf, 2007. pp. 897. ISBN 978-80-7345-130-1.