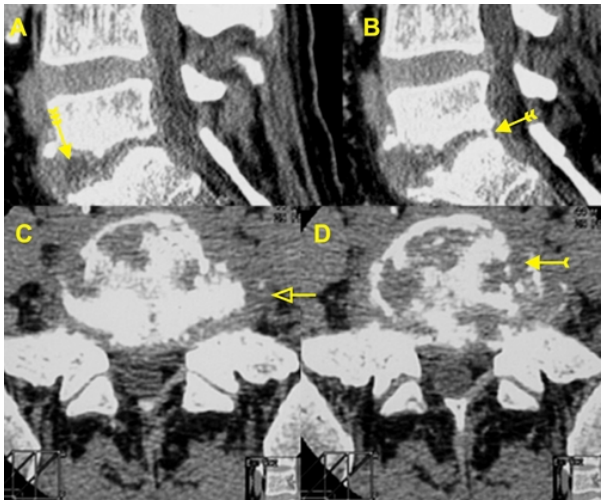
Disk Infection

- Intervertebral septic diskitis is an infectious inflammatory condition resulting in disk and vertebral endplate destruction with usually osteomyelitis in the adjacent vertebral bodies. The disk is destroyed and fluid accumulates in the disk space. Paraspinal abscesses posterior or lateral in perivertebral spaces are often present at the affected level. On MR Imaging the signal intensity within the disk and body endplates is usually iso- to hypo-intense on T1- weighted images and hyperintense on T2- weighted images. After contrast medium injection, the vertebral body often enhances intensly due to osteomyelitis. The disk itself and paraspinal peridiskal abscesses usually enhance intensely at the periphery of the fluid sequestrations.
- In spinal tuberculosis there is usually additional major bone destruction, vertebral collapse, and mixed areas of osteolysis and osteosclerosis.

Case 1

Back pain and fever in a 32-year-old man. Intervertebral septic diskitis.

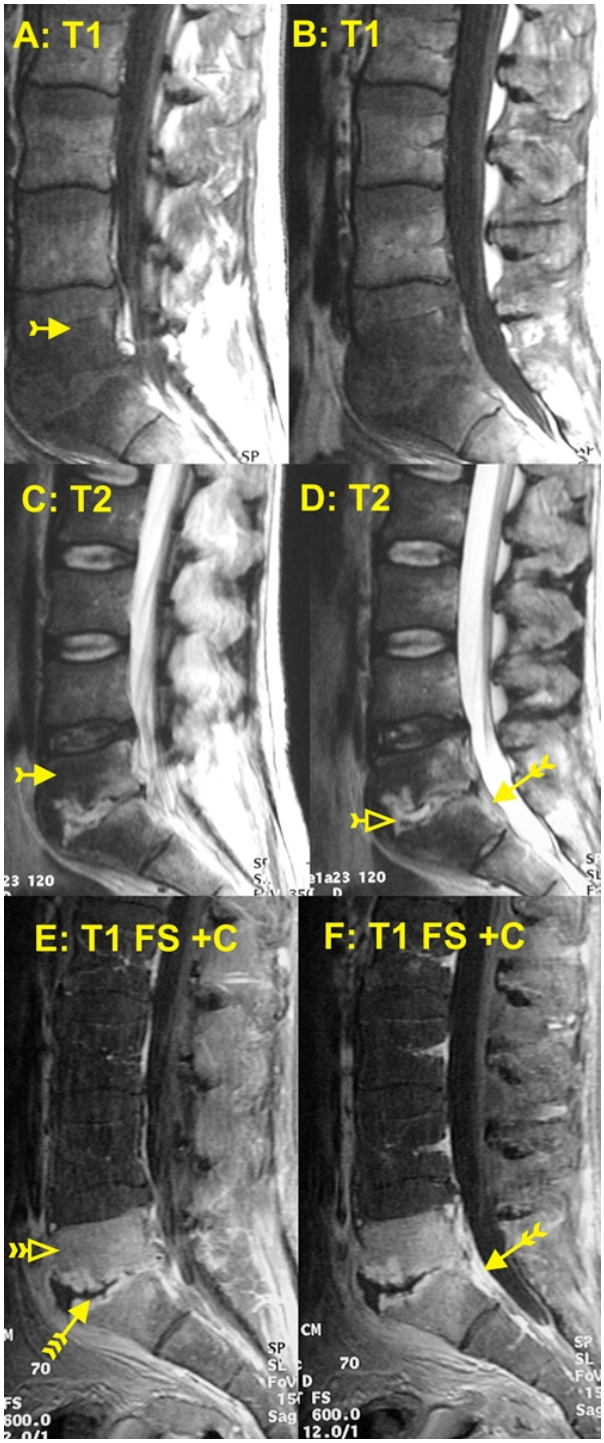


A and B: CT sagittal images. C and D: L5-S1 axial CT image. Intervertebral septic diskitis, narrowing of disk space (arrow II), fluid accumulates in the disk space (arrow III). Infiltration of perivertebral spaces (hollow arrow). Osteomyelitis in the adjacent vertebral bodies (arrow I).

Case 2

Back pain and fever in a 28-year-old man. Septic diskitis.

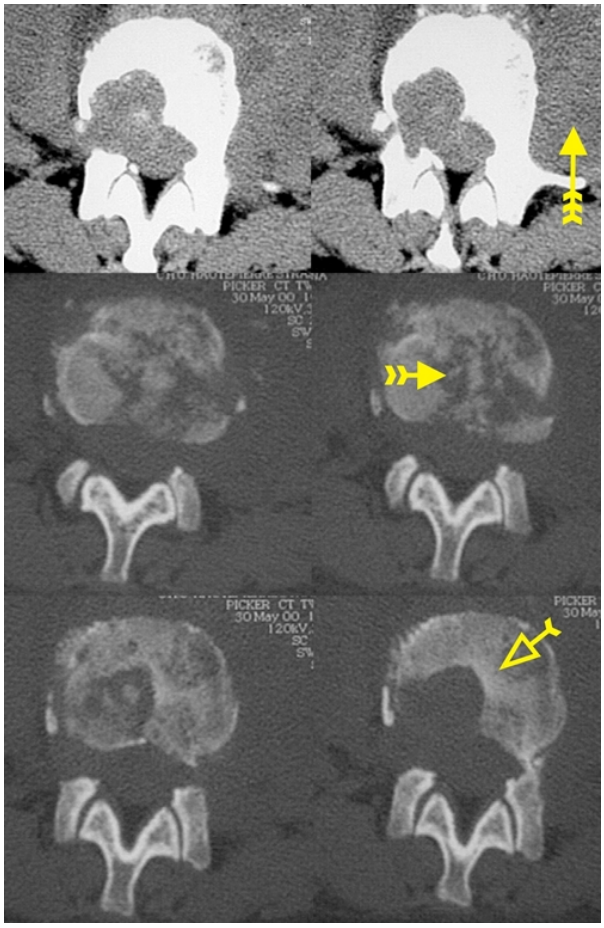
A and B: T1 SE wi. C and D: T2 SE wi. E and F: T1 SE weighted fat suppressed image after contrast medium injection. Intervertebral septic diskitis, narrowing of disk space, fluid accumulates



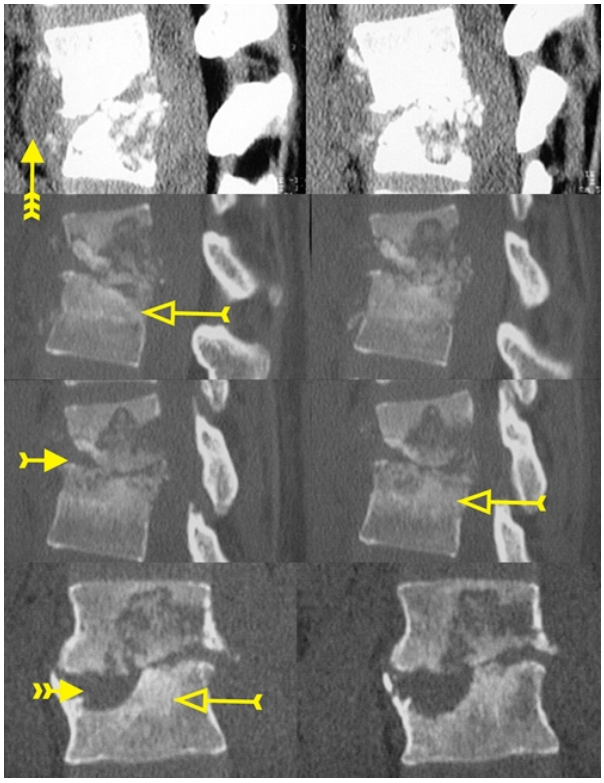
in the disk space (hollow arrow). On MRI the signal intensity within the vertebral body and endplates is usually iso- to hypo-intense (arrow I) on T1 wi. Infiltration of perivertebral spaces (arrow <<). After contrast medium injection, the vertebral body enhances intensely due to osteomyelitis (arrow II). The disk itself enhances intensely (arrow III).

Case 3

Back pain and fever in a 23-year-old man, slow evolution since 3 months. Spinal tuberculosis.

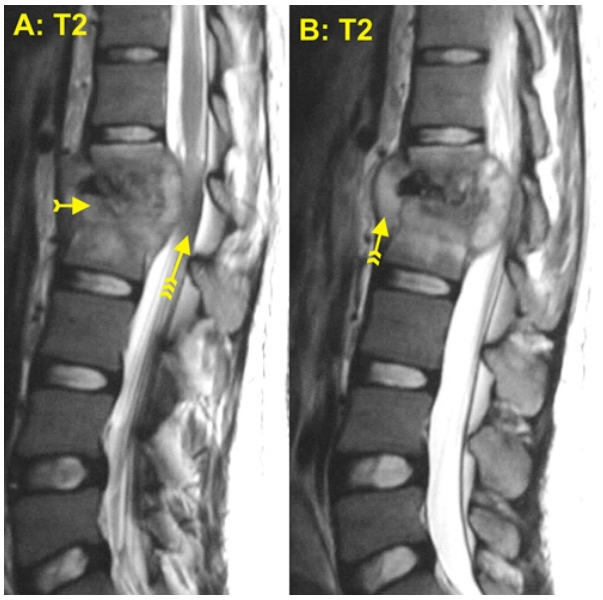


L1-L2 CT images. Intervertebral septic diskitis in spinal tuberculosis. Osteomyelitis in the adjacent vertebral bodies with major bone destruction, vertebral collapse, areas of osteolysis (arrow II), and osteosclerosis (hollow arrow I). Paraspinal abscesses at the affected level (arrow III).



Sagittal CT reconstruction images. Osteomyelitis in the adjacent vertebral bodies with major bone destruction, vertebral collapse, areas of osteolysis (arrow II), and osteosclerosis (hollow arrow I). Narrowing of disk space (arrow I). Paraspinal abscesses (arrow III).

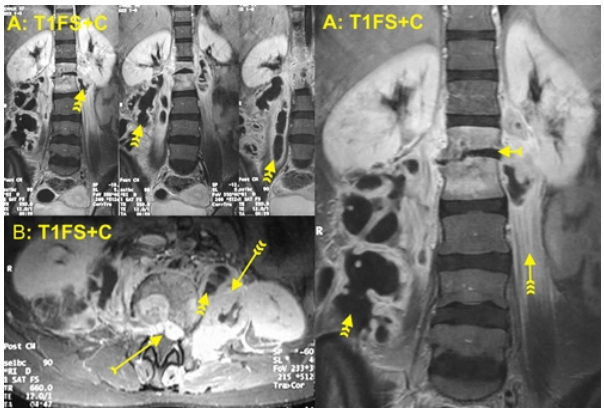
A-B: T1 SE wi. Narrowing of the disk space and vertebral collapse (arrow I). Displacement and compression of the thecal sac and spinal cord (arrow II).



A-B: T2 SE wi. Narrowing of the disk space and vertebral collapse (arrow I). Displacement and compression of the thecal sac and spinal cord (arrow III). Paraspinal abscesses (arrow II).

A-B: T1 SE weighted fat suppressed images after contrast medium injection. Vertebral collapse. The disk is destroyed and fluid accumulates in the disk space (arrow I).

Displacement and compression of the thecal sac and spinal cord (arrow III). Paraspinal abscesses (arrow II). After contrast medium injection, the vertebral body enhances intensely (hollow arrow) due to osteomyelitis, the disk itself and paraspinal spaces enhance intensely .



A-B: T1 SE weighted fat suppressed images after contrast medium injection. Vertebral collapse. The disk is destroyed and fluid accumulates in the disk space (A arrow I). Displacement and compression of the thecal sac and spinal cord (B arrow I). Paraspinal abscesses (arrow II). After contrast medium injection, the vertebral body enhances intensely (arrow II) due to osteomyelitis, the paraspinal spaces enhance intensely .