Dialysis-Related Disease, Spondyloarthropathy

- Destructive discovertebral changes in dialysis patients 2° to amyloid & crystal deposition
- Amyloid deposits in intervertebral disc, facet joint synovium, ligamentum flavum
  - β_2 microglobulin fibrils stain with Congo red; apple-green birefringence with polarized light
- Crystal deposition & ligamentous laxity may contribute
- Previously incorrectly attributed to aluminum toxicity
- Increased incidence with longer duration dialysis (either hemodialysis or peritoneal dialysis)

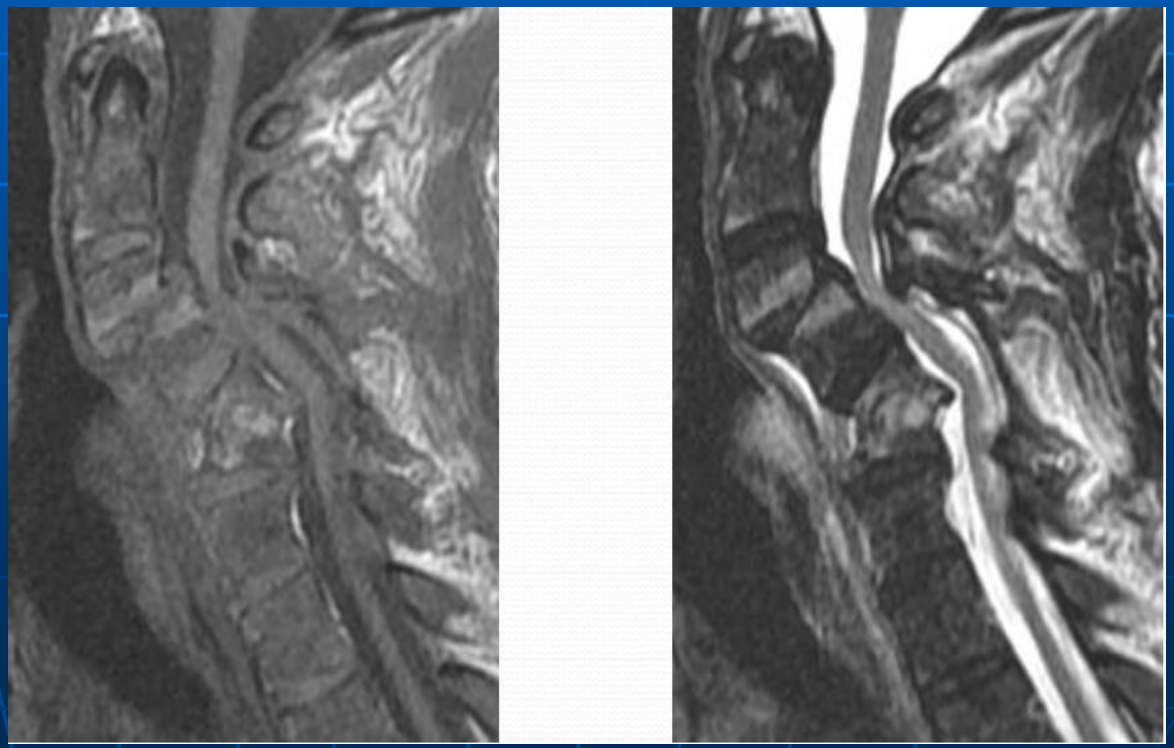
Common Sites

- Hips
- Wrists
- Shoulders
- Knees
- Spine

- In contrast to other types of amyloidosis (e.g., reactive amyloidosis due to chronic inflammatory diseases or multiple myeloma), the visceral form is believed to have a low incidence and to occur late in the course of the disease.

Dialysis Spondyloarthropathy

- Endplate erosions
- May have decreased signal
- Can mimic infection



Dialysis Spondyloarthropathy

Sagittal CT in a 33-year-old man with renal disease on dialysis, shows disc space narrowing, offset, & erosions (white open arrow), but no evidence of soft tissue mass. There are also calcific deposits at multiple levels of the ligamentum flavum (white solid arrow), typical of dialysis-related spondyloarthropathy.