

## A Solitary Lytic Lesion

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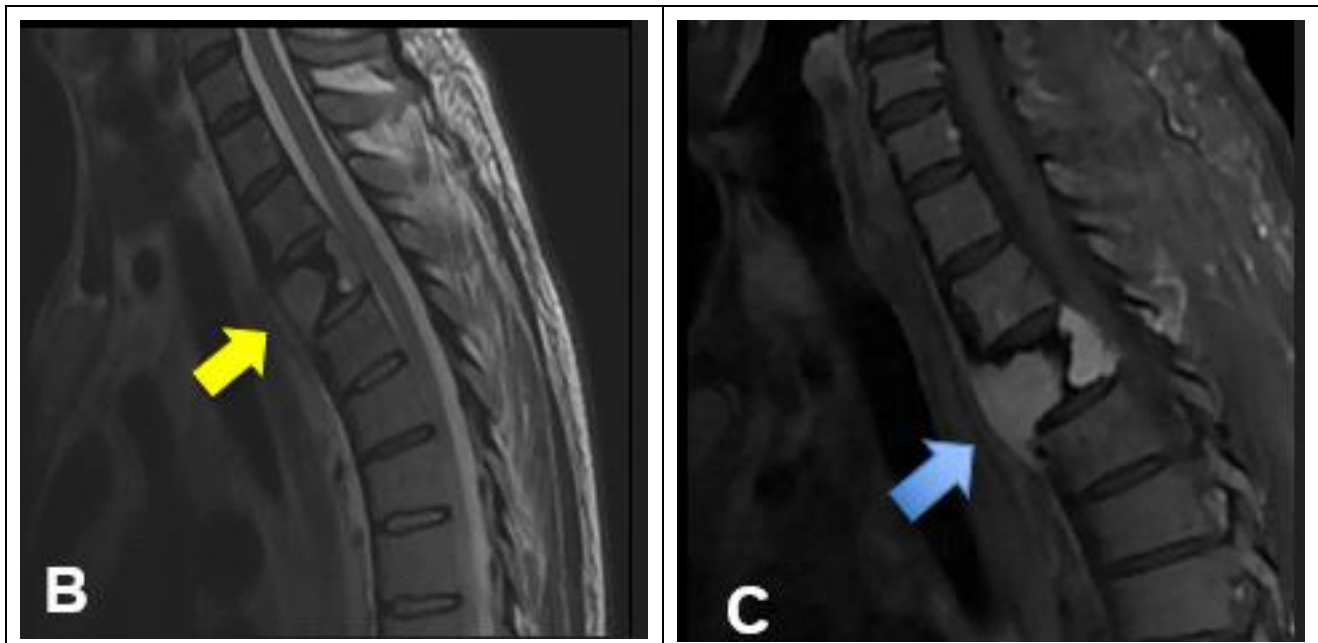
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**Figure 1A:** CT sagittal image shows expansive lytic lesion with thinned out cortex (A, white arrow).



**Figure 2B and C:** MRI images, lytic lesion Signal include iso- to hyperintense to muscle on T2 (B sagittal yellow arrow), T1 C+ (Gd): lesion enhancement (C, bleu arrow).

### Clinical Image

**History:** 40year old patient with no previous history who presents with chronic low back pain. A CT scan of the dorso-lumbar spine confirmed the diagnosis (Figure A) and a complementary dorso-lumbar MRI was requested (Figure B and C).

**Diagnosis:** Solitary bone plasmacytoma.

**Commentary:** Solitary bone plasmacytomas are a rare type of plasma cell tumor that is restricted to the bone. They can affect any bone, although they are more likely to affect the axial skeleton, which contains red marrow [2].

Peak incidence is in 4th to 6th decades.

Pain at the site of the skeletal lesion owing to bone degradation by the infiltrating plasma cell tumor is the most prevalent symptom of solitary bone plasmacytoma.

In addition to the clinical presentation which can be orienting, imaging and biological findings makes the positive diagnosis in front of:

- Radiograph: unique lytic expansile lesion with destructive and thinning cortex [1].
- **CT:** Same aspect as the radiograph and giving aspect of mini brain, but this aspect can missing if the lesion is extremely destructive with endocanal extension.
- **MRI:** lytic lesion hypo- to isointense on T1, T2: iso- to hyperintense with variable enhancement on T1 C+.
- Histology is necessary to confirm the diagnosis which is the case in our patient.

Differential diagnosis [2] are also:

- **Myeloma:** usually is multiple area of destruction associated to renal impairment, anemia and hypercalcemia.
- **Osteolytic metastasis:** frequently are a multiple lytic lesions with common primary cancers are predominantly lytic: Renal cancer, Lung cancer, Thyroid cancer.

- **Brown tumor:** is an osteitis fibrosa cystica and one of the manifestations of hyperparathyroidism, always associated to chronic renal disease, purely multiples lytic lesions that provoke little reactive bone.

Treatment is based on Radiotherapy involving two areas above and below the lesion which is the case in our patient and sometimes surgical treatment by medullary decompression.

Evolution is towards the Local recurrence, Good evolution, sequellar neurological deficit [3].

In our patient good initial evolution has been noted then relapse and medullar compression treated surgically.

## REFERENCES

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