

Infective Spondylodiskitis

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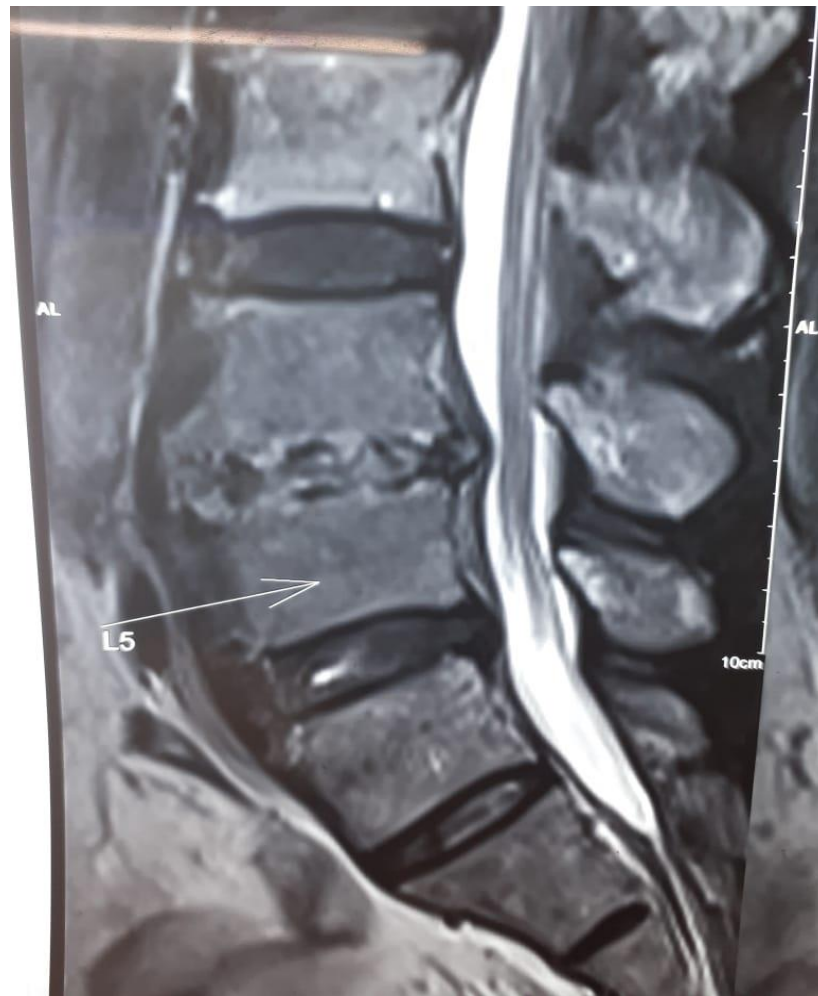
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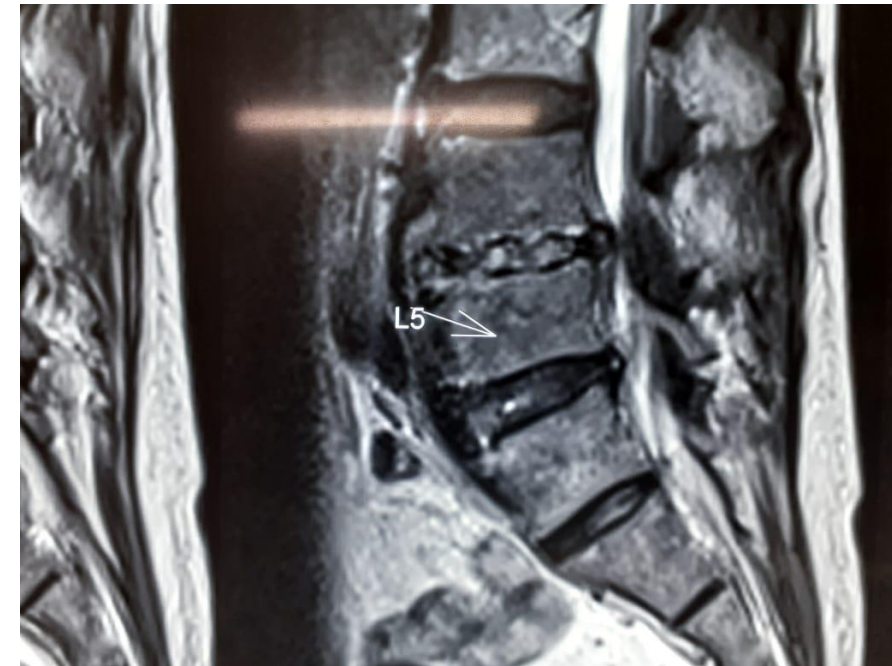
Case report: Infective spondylodiskitis in a 57 year old female

- 57/Female
- No known co-morbidities
- Acute onset of back pain since 15 days
- High grade fever $>101^{\circ}\text{F}$



Diagnostic Evaluation:

- CBC : leukocytosis of 15,000
- Hematological & biochemical workup : WNL
- MRI spine : L4 and L5 vertebral body erosion. L4-L5 spondylodiskitis and an altered signal in bilateral psoas muscles suggestive of myositis with a small abscess (Image).



- CT guided biopsy showed granulomatous inflammation with possibility of tuberculosis.

HISTOPATHOLOGY	
<u>CASE SUMMARY</u>	
CASE NO	:SP5595/19
SPECIMEN	:CT guided trucut biopsy - L4-L5 vertebra.
DIAGNOSIS	:The findings are suggestive of granulomatous inflammation ? Tuberculosis.
ADVICE / COMMENT	:Correlation with AFB culture report.
Clinical Notes	:CT S/O altered signal areas of erosion L4-L5 vertebra. Infecton spondylitiS with discitis p/o TB.
Gross Examination	:Received 6 cores of bony tissue measuring 0.2 to 1 cm in size. All processed after decalcified (AB).
Grossed by	:sk
Microscopy	:Sections show cores of fibro-collagenous & bony tissue. An occasional group of epithelioid histiocytes with occasional multinucleated giant cell and focal necrosis is present.
Test Performed by	:sk/sdd/psd

- Bacterial C/S – No growth
- GeneXpert – MTB not detected
- HPE - Granulomatous inflammation
- Patient was started on AKT 4 (anti-tubercular therapy) but no improvement and back pain worsened

At this stage ID reference was given.

➤ Detailed history was taken:

- Onset – Acute
- Fever – high grade 102-103 °F
- Progression – fast

- 1 month ago she had bilateral obstructive uropathy
- DJ stenting was done
- After DJ stenting multiple episodes of UTIs reported
- Treated with multiple antibiotics for urosepsis

Provisional Diagnosis:-

- Based on clinical and radiological criteria, a pyogenic etiology was suspected rather than tuberculosis.
- A second biopsy was suggested, but the patient's relatives refused.

Treatment:-

- E. coli – ESBL plus was found in one urine culture
- Inj. MEROPENEM 1 gm IV TDS advised
- Initially, there was no improvement observed in the first week but after 10 days clinical improvement was seen
- 6 week of IV antibiotics completed and repeat MRI showed significant improvement

Final Diagnosis:-

- Pyogenic L4-L5 spondylodiskitis (metastatic infection from UTI)

Conclusion:-

- This case underscores the challenges in distinguishing between pyogenic spondylodiskitis and tuberculosis-related spondylodiskitis.
- Clinical, radiological factors and microbiological reports always play a crucial role in establishing the correct diagnosis.

Clinical profile

	Pyogenic	Tubercular
predisposition	Elderly DM UTI Remote infection	Young Pulmonary findings h/o kochs
Onset	Acute, rapid	Subacute, insidious
Fever	High grade	Low grade, Evening rise
Toxic	++ Raised WBC	-
Back pain	Severe	Chronic, Dull
Weight loss	Not significant	Significant
Night sweats/LN	-	Common

MRI findings

	Pyogenic	Tubercular
Region	Lumbar	Thoracic
Predominant involvement	Disc	Vertebral body
Vertebral enhancement	Homogenous	Heterogenous
Number of vertebrae involved	2 or less	Multiple
Subligamentous spread	+	+++
Abscess wall	Thick	Thin
Paravertebral collection	Patchy enhancement Poorly defined initially	Large, well defined Calcification +
Disc destruction	Early	Relatively later
Bony destruction	+ (endplate)	+++ deformity

THANK YOU