



Surgical Management & Outcome of Nontuberculous Bacterial Spondylodiscitis of the axial spine

DR KRISHNA KUMAR R , DR RENJIT KUMAR
Spine Division, Dept of Orthopaedics
Amrita Institute of Medical Sciences,
Cochin, India



Objective:

To analyze the bacteriology, pathologic entities, complications and results of pyogenic discitis patients treated in a tertiary care referral center(Amrita Institute of Medical Sciences, Cochin,India) by file review.

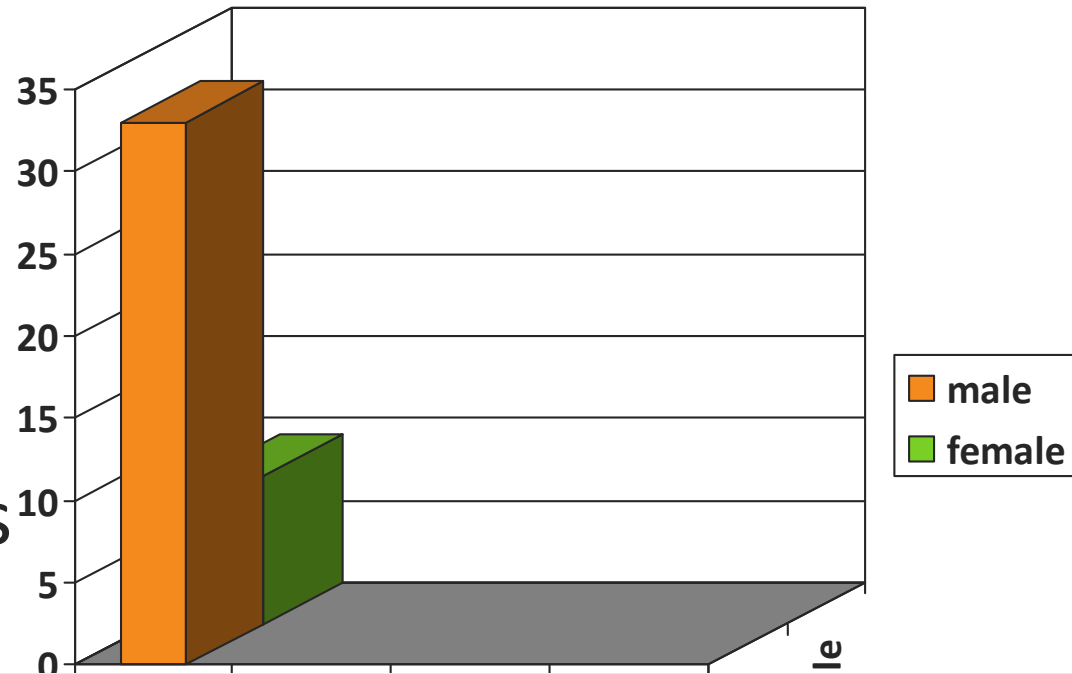
Materials and Methods:

January 2001 to December 2009

Total of 46 patients

Male 33 female 9.

MC Age Gp-50-60yrs



Follow-up period - 6 to 26 months

Mean follow up 9.6 months

Confirmation of Diagnosis -infected material culture report and histopathological examination

Analysis

13(30.95%) had co-morbidities DM,CRF,CA

5(11.9%) had previous spine surgery

3(7.14%) h/o gynaecological surgery

4(9.52%) had history of urological surgery.

<u>Level of vertebra</u>	<u>No of patients (%)</u>
Lumbar	29(69.04%)
Dorsal	8(19.04%)
Cervical	5(11.9%)

Lim et al also found the most common site of infection at the lumbar spine and they believed that this is because of relatively large vertebral body and disc space.

Lim KJ, Kim SM, Jo DJ, Lee TO. Anterior interbody Grafting and Instrumentation for Advanced Spondylodiscitis. J Korean Neurosurg Soc 2008;43:5 -10.

Lumbar Levels

MC Level- L4-5 (16) cases

L3-4 (9)cases

L2-3 (3) cases

One case had five levels involvement


3cases had two levels involvement

Organism Isolated

S aureus	19(45.23%)
E coli	4(9.52%)
Klebsiella	3(7.14%)
Pseudomonas	2(4.76%)
Enterobacter	1(2.38%)
S pneumonia	2(4.76%)
MRSA	2(4.76%)
No growth	9 (21.42%)


Single Bacterium	30
Two bacteria	3
S aureus + E coli	1
Klebsiella +E coli	1
Klebsiella + Enterobacter	1





The combination of epidural abscess, psoas abscess were found in 8 (19.04%) cases.

The pathogen identified in five cases (11.9%) was by aspiration of pus under CT guided or fluoroscopy assisted.

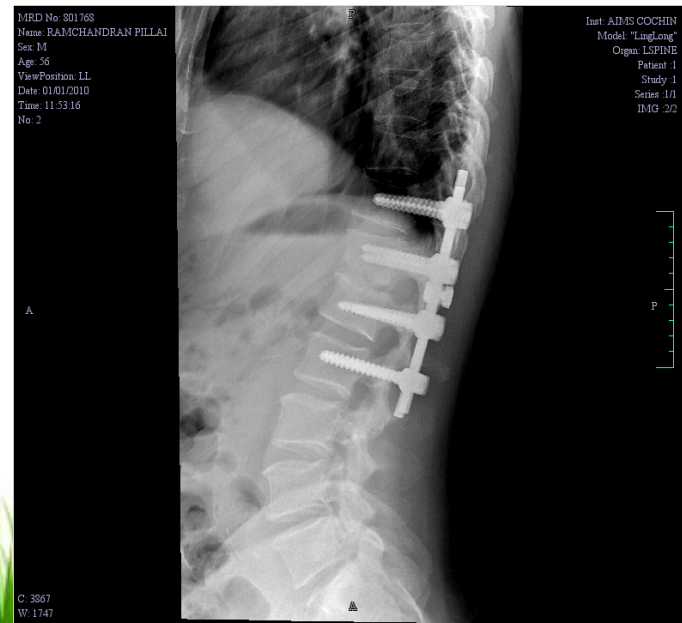


Management

Conservative- 5 Patients
Surgical Rx -37 Patients

Indications for Surgery

failed medical management
spinal instability or developing deformity
neurological deficit
intractable pain.



Surgical Management-37pts

Debridement- 5 cases

Debridement+ Posterior Instrumentation-27
(plif/tlif/plf)

ACDF-3 cases

ALIF -2 cases

Complication- 3 Pts Expired

(all had co-morbid conditions)

Conclusion

- Pyogenic discitis- should be timely diagnosed
- Biopsy – C&S, HPE
- Most common Organism- Staph aureus
- Most Common Level-Lumbar
- Comorbid factors –Alters the outcome



Disclosure declaration

None of the authors has any potential conflict of interest

