

# Abstract #1326.docx

## Cervical Spine Anterior Epidural Abscess With Neurological Impairment – 3 cases

### Introduction/Aim

Cervical spine epidural abscess is a rare condition, a potential life-threatening disease and can lead to paralysis. The morbidity and mortality remain significant, and the delay in the diagnosis is common.

### Material and Methods

The authors describe three cases of anterior cervical spine epidural abscess with neurological impairment and surgical drainage, and illustrate the epidemiologic perspective, risk factors, pathophysiology and diagnosis, as well as the treatment options and final result.

### Results

The first patient had an anterior epidural abscess extending from C2 to C4. The abscess was surgically drained through C3-C4 disc space and an arthrodesis was performed. The patient recovered from ASIA B to ASIA D, but the agent was not identified.

The second patient had an anterior epidural abscess affecting C2 and C3, extending to the top of the dens. The abscess was surgically drained through C2-C3 disc space and an arthrodesis was made. It relapsed and the patient was again submitted to drainage through the same disc space. *S. Aureus* was identified. The patient recovered from ASIA B to ASIA C.

The third case had an epidural abscess at C3-C4 without compression and an abscess at C5-C6 with compression of the spinal cord. A C5-C6 approach with abscess drainage, a Smith Peterson arthrodesis and an anterior plate were used. *S. Pneumoniae* was identified. The patient recovered from ASIA B to ASIA C.

### Discussion

In most cases, the determinants of outcome are the rapidity with which the diagnosis is made and treatment initiated. When associated with neurologic compromise, the treatment of choice is emergent surgical decompression and debridement, with or without spinal stabilization, followed by antimicrobial therapy. Any substantial delay in diagnosis or management can have a detrimental effect on clinical outcome.

### Conclusion

A high index of suspicion of spinal abscess is essential because neurologic abnormalities appear to be irreversible in cases within twenty four hours after onset. Awareness of this rare condition is crucial to prevention of permanent morbidity and life-threatening complications.