Disseminated Infection of Klebsiella Spondylodiscitis

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INTRODUCTION:

Klebsiella pneumonia infection is on the rise especially with increased number of immunocompromised patients in recent years, especially diabetis mellitus. Klebsiella group encounter around 1-5% of all spine infections[1].

REPORT:

A 72-year-old, male presented with instability type lower back pain and inability to ambulate in the past 2 months prior to presentation. Patient denies any history of back pain previously and no significant recent trauma. He is diabetic, and upon further history, he underwent operation of enucleation of right eyeball secondary to purulent endophthalmitis prior to presentation. The result of vitreous culture of right eyeball was Klebsiella pneumoniae bacteria which was sensitive to intravenous Cefuroxime.

His c-reactive protein result was 179mg/L, erythrocyte sedimentation rate was 107 mm/Hour. His blood culture and sensitivity also show presence of Klebsiella pneumonia. His magnetic resonance imaging (MRI) of lumbosacral spine shows features in keeping with lumbar spondylodiscitis with subligamentous, paraspinal and intraspinal involvement at level L2/L3 and L3/L4 vertebrae, but more suggestive of tuberculous spine. Despite the MRI report, we initiate the antibiotic treatment to cover for Klebsiella pneumoniae infection. Patient underwent posterior instrumentation surgery of L1 to L5. Intraoperative culture also yielded Klebsiella pneumonia with same sensitivity as his blood and vitreous culture.

He is currently able to sit up without pain and blood septic parameters significantly improving post antibiotic treatment.

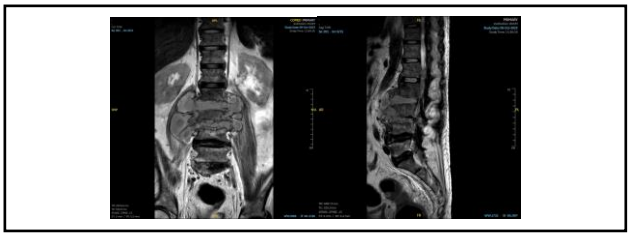

Figure 1: MRI of lumbosacral.

Figure 2: Intraoperative picture shows purulent discharge prior to pedicle screw insertion.

CONCLUSION:

Although the incidence of Klebsiella spondylodiscitis is minor, the clinical presentation and evaluation through blood culture and previous history is crucial to achieve proper treatment and reducing mortality and morbidity.

REFERENCES:

1. Hwang JH, Lee SY, Lee J, Hwang JH. Pyogenic spondylitis caused by Klebsiella pneumoniae: should the possibility of hypervirulent Klebsiella pneumoniae be considered? BMC Infect Dis. 2022 Oct.