A Case Of Pyogenic Spondylodiscitis Complicated With Pseudoaneurysm

Che Saidi SZ, Chan SK, Foo CH, Lim HS
Orthopaedic Department, Queen Elizabeth Hospital

INTRODUCTION:
Spinal infections although common, are rarely associated with pseudoaneurysms. Here, we are reporting a case of pseudoaneurysm of the lumbar artery in pyogenic spondylodiscitis.

CASE REPORT:
67-year-old lady with a background of HPT, Type 2 DM and atrial fibrillation presented with sepsis and was diagnosed to have pyogenic spondylodiscitis of the L2/L3 vertebra based on MRI findings. Concurrently, her blood culture was positive for Salmonella. She underwent anterior debridement and iliac crest bone grafting of the L2/L3.

Her post-op period was then complicated by the discovery of a leaking lumbar pseudo-aneurysm adjacent to the operated vertebral levels. After a successful aortic stenting, she underwent pedicle subtraction osteotomy of L2 and posterior instrumentation form T12 to L5. During the PSO surgery, tissue samples were positive for Candida albicans. Antibiotics that was initially targeted at Salmonella was changed to an anti-fungal. The patient is now able to ambulate with a walking frame.

DISCUSSIONS:
In the context of the perennial question:“which came first, the chicken or the egg?” this patient left us questioning whether the spondylodiscitis lead to the pseudo-aneurysm OR whether the mycotic pseudo-aneurysm was the primary lesion that spread to the adjacent vertebra?

Infective spondylitis occurring concomitantly with mycotic aneurysm is rare\(^1\) and the most prevalent organism associated with microbial aortitis in non-aneurysmal aorta is Salmonella\(^2\).
In hindsight, this patient may have had a pre-existing mycotic aneurysm that was overshadowed by the relatively larger spine collection in the MRI images. It would have been entirely possible then that the aneurysms was disturbed during the anterior debridement thus leading to her post-op complication.

CONCLUSION:
Despite us being unable to answer with definite certainty whether the mycotic aneurysm lead to the spondylodiscitis or vice versa, we are fortunate to have achieved a stable spine and eradicated the infection for our patient.

REFERENCES: