

A rarity of an uncommon entity; 2 case reports of mycotic aneurysm in melioidosis

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Introduction

Burkholderia pseudomallei causes a wide range of disease manifestations but mycotic aneurysms comprise only 1-2% of melioidosis cases [1,2].

Case 1

A 66-year-old diabetic ex-smoker farmer admitted with pain and weakness of the right lower limb for three days and absent pulse was noted in the same. CT aortogram detected a saccular aneurysm in the right common iliac artery measuring $6 \times 10\text{cm}^2$. The patient had white blood cell count (WBC) of $0.17 \times 10^9/\text{L}$ with CRP 207mg/L and ESR 85mm/1st hr.

Aneurysm exclusion and femoro-femoral crossover grafting was done. The aneurysm wall and blood cultures grew *B.pseudomallei* confirmed by latex agglutination. Melioidosis antibody titre was 1:160. No endocarditis noted.

Antibiotics were optimized to meropenem, cotrimoxazole and doxycycline which was continued for 5 weeks. He was discharged on the eradication phase for 20 weeks with complete recovery.

Case 2

A 64-year-old diabetic farmer admitted with swelling, pain and weakness of left lower limb for 1 month with a lump over left groin which was identified as a pseudo-aneurysm with thrombus in relation to left common femoral artery. His WBC was $29 \times 10^9/\text{L}$ with CRP 132mg/L and ESR 124mm/1st hour.

Exploration and pseudoaneurysm repair with thrombectomy was performed and pus from the aneurysmal sac culture yielded *B.pseudomallei*. Melioidosis antibody titre was >1:10240. Antibiotic therapy was optimized accordingly. No endocarditis noted.

Patient clinically improved but on day twenty-five of therapy succumbed to a probable myocardial infarction.

Discussion

Pathogenesis of mycotic aneurysms in melioidosis is haematogenous seeding of already damaged atherosclerotic vessels. Our first case was presented in the 2021 annual sessions of Sri Lanka College of Microbiologists as the first such reported case in Sri Lanka.

Diagnosis is by culture of pus, aneurysm wall and blood along with high antibody titres. Early treatment and timely surgical intervention is crucial in saving patients [1].

Declarations

The authors declare no conflicts of interest in relation to the case report and no funding received.

Author contributions

M.C. Thivandika Jayasundera was involved in patient management, wrote the case report and did revisions. D.L. Bhagya Piyasiri was involved in patient management,

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conceptualized the case report, involved in writing, reviewing, editing and revising the case report. Ranjuka Ubayasiri played a huge role in patient management and contributed to the case report.

Enoka Marie Corea contributed to the diagnostics and management and with the writing of the case report. Yashangi Anjana Wagaarachchige contributed to patient management, and to data and information collection.

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Patient consent: Patient consent was not obtained as the

story was not a recent one and because there is no information to reveal the identity.

Abbreviations

CT - Computed tomography

CRP - C-Reactive protein

ESR - Erythrocyte sedimentation rate

References

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