

Images in Infectious Diseases

Disseminated Multidrug Resistant *Neisseria gonorrhoea* infection in a patient with vasculitic skin rash

Kok Soon Lee^[1] , Masliza Zaid^[2]  and Edmund Liang Chai Ong^[3] 

[1]. Ministry of Health, Johor Bahru, Malaysia.

[2]. Hospital Sultanah Aminah, Johor Bahru, Malaysia.

[3]. Newcastle University Medicine Malaysia, Johor Bahru, Malaysia & Newcastle UK.



FIGURE 1: Vasculitic lesions over the right arm.

FIGURE 2: Vasculitic lesions over the palm.

FIGURE 3: Vasculitic lesions over both feet.

A 48-year-old man was admitted with a 2-day history of a vasculitic skin rash on both his hands and feet. The rash first appeared on his hands before spreading to his lower limbs. Following the rash's appearance, he developed a fever. His medical history included a metallic valve replacement in 2015 and long-term warfarin therapy. He was diagnosed with nasopharyngeal carcinoma in February 2021 and was awaiting chemotherapy. The rash was painful, non-blanching, multiple, raised, smooth, and

erythematous (**Figure 1, 2, and 3**). A cardiovascular examination revealed no murmur, but a clear, crisp mitral prosthetic click was audible. The abdominal examination was unremarkable. Infective endocarditis was initially suspected, and treatment with penicillin and gentamicin was initiated. However, a trans-thoracic echocardiography showed no vegetation. Blood cultures subsequently grew Gram-negative bacilli identified as *Neisseria gonorrhoeae*, which was resistant to penicillin, tetracycline, and

Corresponding author: Dr. Kok Soon Lee. **e-mail:** billylee2477@gmail.com

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ciprofloxacin but sensitive to ceftriaxone. The treatment was switched to intravenous ceftriaxone in place of penicillin and gentamicin, which was continued for 2 weeks, resulting in complete resolution. Further investigations, including a transoesophageal echocardiography and a sexual health screen for HIV, hepatitis B and C, syphilis, and *Chlamydia trachomatis* IgM, were negative. The majority of gonococcal infections in men are asymptomatic^{1,2} and can lead to disseminated bacteraemia, as demonstrated in this case. Gonococcal vasculitic lesions can also present a diagnostic challenge, and there is increasing awareness of drug resistance³.

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