

中文題目：一個漢生病個案罕見皮膚表現

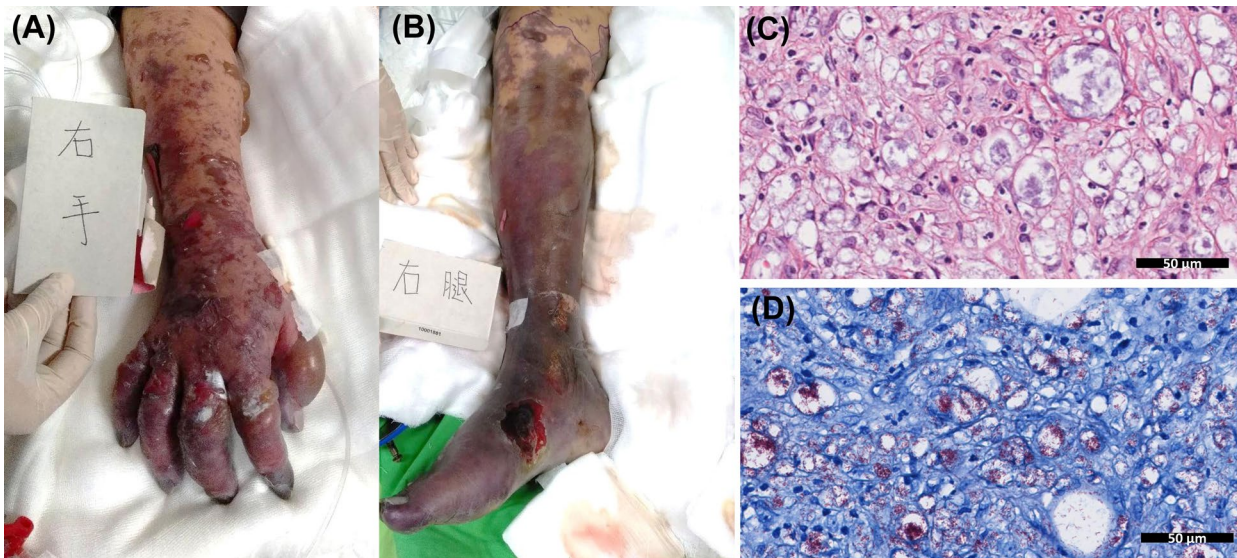
英文題目：A rare Leprosy case with Lucio's phenomenon

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Introduction: Leprosy, known as Hansen's disease due to Dr. Gerhard Henrik Armauer Hansen of Norway, the first person who identify the germ that causes leprosy under a microscope in 1873. It is a chronic disease caused by *Mycobacterium leprae*, or less commonly by *Mycobacterium lepromatosis*, which multiplies slowly and has an incubation period of 2 to 20 years. The clinical presentations were according to it primarily affects from peripheral cutaneous nerves, skin, mucosa of the upper respiratory tract and the eyes and the patient's immune.

Case Presentation: A 32-year-old Indonesian female was a caregiver in Taiwan for 6 years. She had a 10-month history of intermittent pain in the bilateral elbows, hands, and knees. Based on a diagnosis of seronegative rheumatoid arthritis, she was treated with prednisolone (5 mg/day) and methotrexate (2.5 mg). One week before admission, she presented to a local hospital with diffuse purpuric macular lesions on her trunk, four limbs, and both ears. After four days of antibiotic treatment, the patient was referred to our hospital due to the progression of the disease. On admission, physical examination revealed normal body temperature, tachypnea (24/min), and sinus tachycardia (144 beats/min). Dermatological examination revealed retiform purpura with bullae and ulcerative lesions over the four limbs and trunk (Figs. 1a and 1b), A biopsy specimen of the left thigh skin was obtained. Histopathological analysis revealed thrombosis of small- and medium vessels, accompanied by infiltration of neutrophils, lymphocytes, and foamy macrophages distended with grayish-blue tinge globi in the dermis and fat lobules (Fig. 1c). Fite–Faraco staining revealed abundant acid-fast bacilli (Fig. 1d). A positive result of the *Mycobacterium leprae*-specific repetitive element (RLEP) real-time polymerase chain reaction for *Mycobacterium leprae* led to the diagnosis of leprosy. The patient received multidrug therapy for leprosy (rifampicin 600 mg once monthly, dapsone 100 mg daily, and clofazimine 300 mg once monthly plus 100 mg daily), systemic glucocorticoids, and anticoagulation therapy. She also underwent surgical debridement and skin grafting for the wound. One month after the diagnosis, the patient died of massive duodenal bleeding complicated hypovolemic shock.



Discussion: Lucio's phenomenon is a rare manifestation among lepromatous patients with a rapid and severe evolution and high mortality. As the mechanism of Lucio's phenomenon is poorly understood, the most accepted hypothesis is uninhibited multiplications of bacilli and enhanced exposure of antigens to circulating antibodies, resulting in an immune complex occlusion in veins and subcutaneous tissue, progressing to a cutaneous hemorrhagic infarction. The management of Lucio's phenomenon includes multidrug therapy, systemic steroids, immunosuppressants, and anticoagulants. Since it is difficult to diagnose especially in non-endemic areas which leads to delay treatment and high morbidity or mortality, a high suspicion is very important for early diagnosis, and prompt treatment can improve the disease outcome in areas nonendemic for leprosy.

Conclusion: In these cases, exposure to immunosuppressive agents may result in high bacillary burdens. Despite the timely diagnosis and adequate treatment of Lucio's phenomenon in this patient, she died of other medical complications. Thorough history-taking to avoid misdiagnosis and incorrect treatment is the cornerstone of clinical practice.