Symmetrical peripheral gangrene, an uncommon complication of tuberculosis

A 74-year-old man was admitted with abdominal discomfort, fever and chills in the previous 2 weeks. Physical examination revealed a vague Murphys’ sign on abdominal palpation. Abdominal ultrasonography demonstrated a distended gallbladder and acute cholecystitis was initially diagnosed. He underwent a laparoscopy and multiple caseous nodules over the peritoneal cavity were found. Histopathological examination revealed granulomatous inflammation with several acid-fast bacilli. The patient received anti-tuberculous chemotherapy. However, progressive symmetrical acrocyanosis with bulla formation of peripheral extremities developed on Day 4 post-laparoscopy (Figure 1). Surgical tissue and blood cultures yielded *Mycobacterium tuberculosis*. No other pathogen was found from blood or other culture sampling. The patient was discharged with anti-tuberculous medication without the need for amputation or graft surgery. Symmetrical peripheral gangrene (SPG) is a symmetrical distal acrocyanosis of two or more extremities that progresses to gangrene in

Figure 1. Symmetrical peripheral gangrene in hands and feet, a rare complication of tuberculosis.

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the absence of large vessel obstruction.\textsuperscript{1,2} Potential mechanisms leading to SPG include vasoconstriction, hypotension, vascular obstruction and endothelial damage. Mortality can reach 40\% and almost 50\% of survivors require amputation of affected limbs. About 80\% of SPG is related to sepsis with disseminated intravascular coagulation. \textit{Mycobacterium tuberculosis} is a rare microbial cause of SPG.\textsuperscript{3} No specific treatment has been proven to reverse the gangrene and management of underlying causes is crucial.

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\textbf{References}

