



Erysipelas after Femoro-Tibial Bypass Surgery

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An 81-year-old male patient underwent a right femoro-posterior tibial artery bypass with ipsilateral reversed saphenous vein graft. One month later, he visited the emergency room with fever accompanied by swelling and redness on his right leg. A blood test showed no leukocytosis but elevated C-reactive protein (CRP). No microorganisms were identified on blood culture. He was managed by intravenous (IV) antibiotics and subsequently discharged with oral antibiotics.

Five months later, the patient visited the emergency room with the same problems but with a severer clinical condition. He complained of high fever (39°C) and swelling and redness of the right leg (Panel A). A laboratory test showed white blood cell 27,000/μL, CRP 15 mg/dL, and gram-positive cocci (*B-lactam streptococcus dysgalactiae*) was identified on blood culture. IV antibiotics was administered for one week. The fever subsided shortly and the swelling and redness of the leg improved gradually (Panel B). He was discharged with oral antibiotics.

Even after discharge, during follow-up, the patient often complained of mild swelling without pain or redness in his leg, which was improved spontaneously.

Erysipelas is a skin infection typically involving the dermis layer, but it may also extend to the superficial cutaneous lymphatics. It is characterized by well-demarcated and raised erythema and often affects the lower extremities. Its diagnosis can overlap with cellulitis; therefore, often an exact diagnosis cannot be made. Cellulitis has ill-defined borders and is slower to develop, whereas erysipelas has better-defined borders and a faster development [1]. Erysipelas can be serious but rarely fatal, and has a rapid and favorable response to antibiotics. The most common cause of infection is group A streptococci [2].

Risk factors for erysipelas include excising the saphenous vein for bypass, lymphatic edema, arteriovenous fistula, status post-surgery, nephrotic syndrome, and an immunocompromised state.

Antibiotics against streptococci should be initiated when erysipelas is suspected. Penicillin as monotherapy remains the first-line antibiotic for erysipelas; however, if there is evidence of an abscess or a gangrene, surgical debridement is necessary [3].

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