

Yu-Tzu Tsao
Wei-Liang Chen
Jui-Chang Chen

Pathergy phenomenon: huge pyoderma gangrenosum following tube thoracostomy

Received: 30 July 2014
Accepted: 1 August 2014
Published online: 15 August 2014
© Springer-Verlag Berlin Heidelberg and ESICM 2014

Y.-T. Tsao (✉) · J.-C. Chen
Department of Critical Care Medicine, Taoyuan General Hospital,
Ministry of Health and Welfare, No. 1492, Chung-Shan Road,
Taoyuan, Taiwan
e-mail: tsaoyutzu@gmail.com
Tel.: 886-3-369-9721

W.-L. Chen
Department of Community Medicine, Tri-Service General
Hospital, Taipei, Taiwan



Fig. 1 A giant cutaneous ulcer occupying the entire right chest wall showing a large purulent base covered by necrotic eschars and a surrounding erythematous halo, characteristic of pyoderma gangrenosum

A 37-year-old man was referred for the management of right-sided spontaneous tension pneumothorax. He underwent tube thoracostomy that fully re-expanded the right lung. However, the tissue surrounding the tube insertion site became necrotic and extremely painful and progressed to extensive deep ulceration over the next 2 weeks (Fig. 1). Laboratory findings were unremarkable and results of microbiological studies were all negative. A skin biopsy showed neutrophilic dermatosis with a diffuse infiltrate of polymorphonuclear cells, consistent with pyoderma gangrenosum. The patient responded well to a 3-day course of pulse therapy with methylprednisolone and all skin lesions healed completely within 6 months.

Pyoderma gangrenosum is a rapidly evolving, non-infectious skin disease, characterized by the presence of

painful, irregular, boggy, red-purple ulcers with an undermined purple-to-red margin and a halo of surrounding erythema. It can develop at sites of skin trauma, a cutaneous phenomenon known as pathergy. The etiology is unclear and there is no confirmative laboratory test or pathognomonic histological feature. The diagnosis is one of exclusion. Systemic corticosteroids are considered the most predictable and effective therapy. Surgical treatment may worsen skin lesions and should be avoided. Clinicians must maintain a heightened awareness of this distinct manifestation.

Conflicts of interest None declared.