Pyoderma Gangrenosum

A 31-year-old woman, newly diagnosed to have ulcerative colitis, was referred for dermatological evaluation of recurrent, multiple, intensely tender, ulcerated lesions on her lower limbs, lower abdomen, genitalia, and buttocks for the preceding few months. Areas of the lesions used to heal with prominent scarring while progressing at the other regions. At presentation, examination revealed two large extremely tender, ulcerated plaques of similar morphology, situated over the medial aspect of left thigh (Fig. 1) and over the left side of her lower abdomen encroaching over the genitalia (Fig. 2). They were angry-looking, crusted, ulcerated plaques with an elevated, violaceous, undermined border. The healed portion of the lesions on thighs, buttocks and other parts of lower limbs showed extensive cribriform scarring. Lesional incisional biopsy showed massive neutrophilic infiltration, scattered areas of haemorrhages, and necrosis of the overlying epidermis. Gram staining, bacterial culture, fungal culture, and culture for mycobacteria, from the ulcerated areas were negative. Routine laboratory investigations were noncontributory. Based on the clinical course and histologic findings, a diagnosis of pyoderma gangrenosum was made. The patient was put on systemic steroid (60mg prednisolone/day) and dapsone (100 mg/day). All the cutaneous lesions subsided with residual scarring (Fig. 3) within 6 months.

Pyoderma gangrenosum (PG) is a distinctive, rare, destructive inflammatory skin disease of unknown aetiology. In about half of the cases PG is associated with systemic diseases like inflammatory bowel disease, polyarthritis, haematologic disorders (such as leukaemia or preleukemic states), psoriatic arthritis, spondyloarthropathy, hepatitis, primary biliary cirrhosis, and immunologic diseases (such as lupus erythematosus and Sjögren's syndrome). Pain is the predominant complaint of PG and the disease is clinically characterized by deep ulcerations with violaceous overhanging borders over the ulcer bed. Although leg is the commonest site affected, PG can occur at any site of the body and no age is spared. Histopathological features are nonspecific and include massive neutrophilic inflammation, necrosis, haemorrhage, and rarely granulomatous dermatitis. As there is no specific diagnostic test, the diagnosis of PG mainly depends on clinical presentation and natural course. The topical therapies of PG include super-potent topical corticosteroid, tacrolimus, and pimecrolimus. Systemic corticosteroid is the mainstay of treatment, which may be combined with dapsone, tetracycline group of drugs, immunosuppressants (like cyclosporine, mycophenolate mofetil, azathioprine, cyclophosphamide, and methotrexate) and other drugs like thalidomide, tumour necrosis factor-alpha inhibitors, and intravenous immune globulin. Other modalities of therapy include hyperbaric oxygen, local wound care, and dressings. Surgery is usually avoided.

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