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Case Report

# A case report of pyoderma gangrenosum in bartholin abscess: A rare misdiagnosis

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## ABSTRACT

Pyoderma gangrenosum is a rare ulcerative cutaneous condition due to dysregulation of immune system with a female predominance. A 20 yr old unmarried female presented with chief complaint of fever and a painful perineal swelling with foul smelling discharge from it and was initially diagnosed as a Bartholin abscess for which drainage with marsupialisation done. But in a time of 3 days it turned into a necrotizing ulcer and was rediagnosed with help of dermatologists as pyoderma gangrenosum which responded well to steroids by rapid healing.

**Keywords**: Bartholin abscess, cutaneous ulcer, pyoderma gangrenosum

## INTRODUCTION

Pyoderma gangrenosum is a rare ulcerative cutaneous condition due to dysregulation of immune system with a female predominance commonly during 4th-5th decade of life that causes tissue to become necrotic with deep ulcers mostly in legs, affecting 1 in 100,000 population and is considered to be a disease of exclusion.[1,2]

## CASE REPORT

A 20-year-old unmarried female presented to our emergency unit on 21.02.14 with complaints of fever and a painful perineal swelling with foul smelling discharge for 5 days. Her menstrual cycles were regular with the average flow. She came from low socioeconomic status. She is a known epileptic since childhood and on medications. Her general condition was stable with normal vitals except tachycardia likely due to fever and normal systemic examination. On inspection of genitalia right sided bartholin abscess of size 7 cm × 8 cm with tense shiny rogues skin over it. There was foul smelling discharge appearing like molten wax, other side being normal. All laboratory parameters were normal. She underwent urgent drainage of the abscess with injectable antibiotics under short general anesthesia. Drainage of the abscess by a vertical curvilinear incision with marsupialization of the sac was done. Post-operative period was uneventful till 3rd day when on inspection of vulva redness and induration was found in the bilateral ischiorectal area, which rapidly progressed to a kissing ulcer and soon into a necrotising ulcer. Hence, intravenous antibiotics were continued, and dressing of the ulcer was started with normal saline. A dermatology consultation was sought for. Diagnosis of pyoderma gangrenosum was made based on findings of the well-defined ulcer with violaceous margins and rapid progression with pathergy (increase in ulcer size with dressing). She was started with oral prednisolone 1 mg/kg/day, dressing of the ulcer and antibiotics were stopped. There were a good response and the ulcer healed to more than 70% in a span of 3 days.

## DISCUSSION

Pyoderma gangrenosum is an uncommon cutaneous condition of uncertain etiology but can be associated with various systemic illnesses, including vasculitis, gammopathies, rheumatoid arthritis, leukemia, lymphoma, hepatitis C virus infection, systemic lupus erythematosus, sarcoidosis, polyarthritis, Behçet disease, hidradenitis suppurativa, and especially inflammatory bowel disease.[3,4]

There are two main types of pyoderma gangrenosum:[5]

- The 'typical' ulcerative form, which occurs in the legs
- An 'atypical' form that is more superficial and occurs in the hands and other parts of the body.

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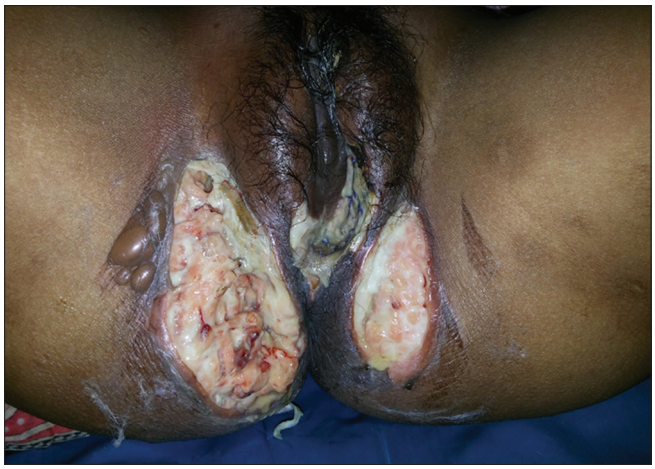

**Figure 1:** B/L necrotizing ulcer with slough in ischiorectal region

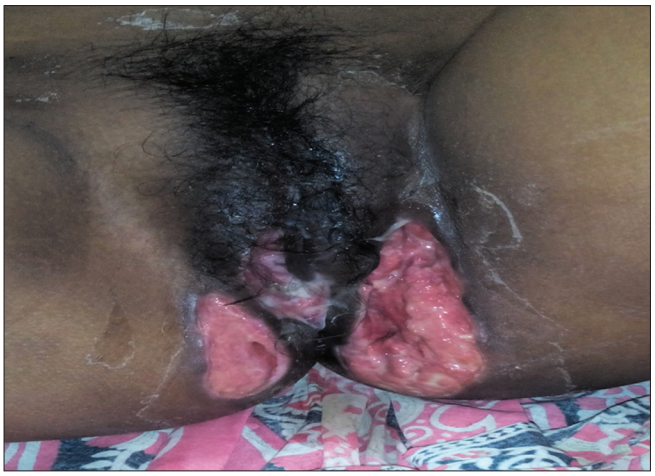

**Figure 2:** Healed ulcer with granulation tissue after systemic steroids

Other variations are:[6]

- Peristomal pyoderma gangrenosum is 15% of all cases of pyoderma
- Bullous pyoderma gangrenosum
- Pustular pyoderma gangrenosum
- Vegetative pyoderma gangrenosum.

Investigations required complete blood count, liver function tests, hepatitis profile, bone marrow biopsy to rule out malignancy.[7] No specific treatment is effective in this condition so multiple treatment modalities are still in research trials. Topical therapies include gentle local wound care and dressings, superpotent topical corticosteroids, immune modifiers tacrolimus and pimecrolimus.[8] Systemic therapies include corticosteroids, cyclosporine, mycophenolate mofetil, azathioprine, dapsone, tacrolimus, cyclophosphamide, chlorambucil, thalidomide, tumor necrosis factor-alpha inhibitor and nicotine.[9] Recent trends in management options include pulsed methylprednisolone, pulsed cyclophosphamide, infliximab, intravenous immunoglobulin ustekinumab and hyperbaric oxygen.[10,11] Surgery should be avoided because of the pathergic phenomenon that may occur with surgical manipulation or grafting, resulting in wound enlargement. In some patients, grafting has resulted in the development of pyoderma gangrenosum at the harvest site.[12]

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## PEER REVIEW

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## CONFLICTS OF INTEREST

Nil

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