

## PYODERMA GANGRENOSUM

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Pyoderma gangrenosum is a rare condition of burrowing, colliquative necrosis and ulceration of the skin<sup>1</sup>, with undermined advancing borders. It was first described by Burnsting et al<sup>2</sup> (1930). Later he<sup>3</sup> (1954) and Percival (1957)<sup>1</sup> reported its association with ulcerative colitis and put forward the hypothesis of synchronous primary epithelial damage to the skin and bowel. Maransow<sup>3</sup> (1955) described a case with accompanying hypogamma globulinaemia.



Martindate<sup>6</sup> reported a case of pyoderma gangrenosum after gangrenous appendix. We had observed pyoderma gangrenosum, in a child of 3 years, who was having temperature for 8 days, and frequency of motion with blood and mucus and dehydration for 4-5 days. Being a rare entity, and association with dysentery of short duration has prompted us to report this case.

## CASE REPORT

A female child, aged 3 years, resident of Udaipur was admitted in General Hospital Udaipur on 20.9.64. The presenting complaints were temperature for 8 days, frequency of motion with blood and mucus for 4-5 days, and a bulla over the upper part of the sternum of one day duration. Within 24 hours the size of the bulla increased from a gram size to that of almond. The toxæmia of the patient markedly increased, and the child was admitted in a moribund state. Previous history, and family history was of no significance. Examination revealed a child of 3 years well built, dehydrated, semiconscious, eyes sunken, pupils narrow, but reacting to light, lips dry, tongue dry slightly furred, and red, elasticity of the skin was diminished, no cyanosis, no jaundice. The temperature was 101/6°F, Pulse 160/mt., regular with low volume, respiration 30/mt. The systemic examination was negative. Locally there was a bulla, size of an almond over the upper part of sternum (Photograph No. 1) with an elevated border, tendency to spread to normal skin rather than to break out and reddish areola around the margins. On 21/9/64 the bulla increased to the size of walnut with slough in the centre. Investigations revealed total leucocyte count 9,800/-cmm. of blood, Polymorphs 68% Lymphocytes 28 Eosinophils 3% and large monocytes 1% Hb. 8-5gm.% Total red blood count 2.6 mill/mm. of blood. The smear examination from bulla. showed no diptheria bacilli, only streptococci were seen in few number, stool examination revealed bacillary exudate. The treatment was started by Inj. terramycin 50 Mg. parenterally in a drip of saline 500 cc. for 2 days. Then subcutaneous saline 400 c.c given for 3 days, and Terramycin continued for 5 days, and Dexamethasone 0.5 Mg Tab. first 6 days one 6 Hrly, then one 8Hrly 3 days for 14 days in a tapering dosage. Patient responded with this treatment and discharged cured with advice to come for check-up weekly as the ulcer was not healed completely.

## DISCUSSION

Burnsting et al<sup>2</sup> regarded Pyoderma gangrenosum or Ecthyma gangrenosum as but one part of a generalized infection syndrome characterized by a marked lowering of the bodily resistance to the invading organisms. There is evidence that lesions of pyoderma gangrenosa are embolic or produced by arthus phenomenon<sup>7</sup> Andrews and Domonkos have suggested the concept of autoimmune reaction to this disease. It has been suggested that there may be symbiosis between anaerobic streptococci and haemolytic streptococci in producing this colliquative necrosis and ulceration (Meleney's ulcer). In our case we found only few streptococci. Others have described bacillus *Pyocyanus* and staphylococci in lesions. While on the other hand in a series of 19 cases, 11 of which had coexistent ulcerative colitis Perry and Burnsting<sup>9</sup> found no organism in the skin lesions common to all the cases described. Melezer<sup>8</sup> showed a viral bacterial symbiosis in which various bacteria increased the pathogenicity of virus. Many cases run a protracted course others fulminant and end fatally. Condition is more dangerous in children<sup>8</sup>. Our case was a child, who responded satisfactorily on the other hand.

Study of the literature showed the relationship of pyoderma gangrenosum to dysentery due to loss of fluid and electrolytes, massive intestinal haemorrhage, in exten-

sive cachetic states<sup>1</sup>, ulcerative colitis<sup>7,10</sup> and to lesions elsewhere in the gastro intestinal tract, such as cholecystitis, acute perforated appendicitis, and peptic ulcer<sup>9,10,11</sup>. This case had fever, and dysentery with possible loss of fluid and electrolytes.

#### SUMMARY

A case of pyoderma gangrenosum in a child, who had fever, dysentery with loss of fluid and electrolytes is reported and the relevant literature reviewed.

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