PYODERMA GANGRENOSUM FOLLOWING ABDOMINAL HYSTERECTOMY*

by

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'Pyoderma Gangrenosum' is a rare condition, of unknown etiology, presenting as chronic burrowing, ulceration, inflammation, general toxicity and septicaemia. Defective immune response has been thought to be responsible for the condition but there is no positive evidence. It is known to be associated with ulcerative colitis, rheumatoid arthritis and lung abscess. A case of Pyoderma Gangrenosum following abdominal hysterectomy is discussed.

CASE REPORT

A 50 year old multipara had total abdominal hysterectomy with bilateral salpingo-oophorectomy for multiple fibroids of uterus. The appendix was also removed as it was adherent to the broad ligament posteriorly. The skin was apposed with Mitchell Clips and tension sutures of Nylon. The histology of the specimen showed fibroids undergoing hyaline degeneration. There was no evidence of malignancy.

Since 3rd post-operative day the patient developed intermittent pyrexia (101/103°F) which did not settle. She was given injections of soluble penicillin and streptomycin. The Clips were removed on the 7th day. On 9th day the scar started ulcerating with an erysipelas like red inflammation extending laterally. More necrosis and sloughing continued inspite of antibiotic therapy, till it involved whole of the anterior abdominal wall from umbilicus to symphysis pubis and as far laterally as the iliac crests (Fig. 1).

A high vaginal swab and midstream urine were sterile on culture. A wound swab revealed bacteroides sensitive to Tetracycline and Erythromycin. Blood cultures were sterile.

Temperature persisted (101/104°F). On 14th post-operative day she was given Erythromycin 250 mg. 6 hourly and Fucidine 520 mg. B.D., along with Parentrovite injections daily. The wound was dressed with Aserbine lotion. The lesion continued to extend with ulceration and gangrenous necrosis. A course of Cephaloridine was given.

On 15th post-operative day necrosis was superficial except for two deep cavities in the midline (which were deep as far as rectus sheath). Necrosis was preceded by a line of acute inflammatory reaction at skin edge resembling erysipelas.

Histology of skin biopsy showed chronic inflammatory reaction and few intra-epithelial abscesses. There was no parasitic or fungal infection.

On 17th day the patient became jaundiced, comatosed and toxic with blood urea 290 mg./100 ml. and a low serum sodium. Serum bilirubin was 6.4 mg./100 ml. She was given intravenous fluids, Dalacin C 450 mg. 6 hourly and Hydrocortisone 400 mg. 6 hourly for 5 days, followed by Prednisolone 30 mg. daily. Her general condition improved, the lesion stopped extending. Serum electrolytes and blood urea returned to normal. Most of the slough clear-

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ed and healthy granulation tissue appeared in patches. Her temperature settled.

As the condition was improving Prednisolone was reduced to 5 mg. daily. The healing then ceased and sloughing restarted. The Prednisolone dose was therefore maintained at 30 mg/day. Epithelialisation was rapid (Fig. 2).

A Mitchell Clip and a piece of Nylon was strapped around her leg to test allergic reaction. She developed local erythema and pruritus in 12 hours.

The patient recovered completely and was discharged on Prednisolone 10 mg. daily: She was seen in the Out-Patient Clinic twice and was doing well upto 6 months after discharge.

Summary

A 50 year old patient had abdominal hysterectomy for fibroids She developed extensive gangrenous, ulceration and sloughing of abdominal wound associated with pyrexia and toxaemia. Antibiotics were not effective. Bacteroides were grown from wound on one occasion. The immediate and dramatic response to corticosteroids was remarkable. Within 24 hours a moribund patient became non-toxic and gangrene stopped extending. Three days after corticosteroid therapy granulation tissue appeared. The healing stopped on reducing the dose of Corticosteroids.

Comments

The source of bacteroides could be gastro-intestinal tract, i.e., during appendicectomy. Pyoderma Gangrenosum is known to be associated with allergy due to bacterial flora. However, the allergic response to Mitchell Clips and Nylon used for skin cannot be excluded as the patient developed pruritus and erythema when the former were strapped around her leg.

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See Figs. on Art Paper VI