ACNE CONGLOBATA

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Summary

A male patient suffering from severe mutilating acne conglobata is described. Detailed study of cell mediated immunity and bacteriology was done. Etiopathogenesis of the disease is discussed.

Acne conglobata is a rare disease of a highly inflammatory nature, with usual features of acne vulgaris. Multiple comedones, cysts, abscesses and sinus tracts healing with severe keloid formation are some of the additional findings. Antecedent history of acne vulgaris may be available, but lesions quiescent for years may become active without any provocation. Bacteriology is diverse and every type of organism including coagulase positive staphylococci, hemolytic streptococci, non-specific organisms like coagulase negative staphylococci and anaerobic diphtheroids have been grown. Suppurative hidradenitis and dissecting folliculitis of the scalp may also be present. Systemic symptoms like arthritis have been found to be associated[1]. Normocytic normochromic anaemia, raised leucocytic count and increased ESR have been reported in these patients. Gamma globulin level may be normal or slightly elevated. However, the titre was found to be low in two patients[2], where injections of Gamma globulin produced a satisfactory therapeutic response.

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The cell mediated immune state has not been studied in these individuals to any satisfactory degree. A patient with severe acne conglobata is reported here where various immunological parameters were studied and found to be normal.

Case Report

27 years old male was admitted to the Dermatology Ward of Nehru Hospital of Post-graduate Institute of Medical Education & Research, Chandigarh, with six years' history of multiple boils, discharging sinuses and irregular scar formation, involving the neck, chest and other parts of the body. Various treatments tried were of no avail. There were no constitutional symptoms pertaining to any system. He was a pale and emaciated individual. Systemic examination was non-contributory. Dermatological features consisted of large irregular scars and keloids, varying in size from 2 cm. x 3 cm. to 3 cm. x 10 cm. in diameter, present mostly on the front of the neck, front and back of the chest (Fig. 1 Page No. 175) axillary folds, antecubital fossae (Fig. 2 Page No. 175), inguinal regions, buttocks, thighs and legs. Some of the lesions were crusted with pus oozing out. Some showed large comedones, upto three, present at many places. Few small lesions in the form

of firm nodules of the size of 1 cm. x 5 cm. were present on the thighs and arms showing hard keratinous core. Contractures of the neck were present which had resulted from old healed lesions.

Routine investigations like hemoglobin, total and differential leucocytic counts, stool and urine examinations revealed no abnormality. Serum biochemistry including blood sugar fasting and post prandial was within normal range. Blood culture was sterile. Serum proteins were 7.8 gms % with albumin 2.4 gms. % and globulins 5.4 gms. %. Serum electrophorisis showed marked hyperglobulinemia with increase of α 2 β and ν-globulins. T & B lymphocytes showed readings of 19% and 53% respectively. Blast transformation after PHA stimulation was also within normal range. Intradermal testing was carried out with the various recall antigens (lepromin, trichophytin, tuberculin and candidin) and contact allergens (DNCB). The cutaneous response to each of these was recorded as normal. Histopathology of lesion revealed a non-specific picture. Pus culture taken twice showed growth of staph. albus, sensitive to streptomycin, chloromycetin and Gentamycin and resistant to tetracyclines. Treatment with streptomycin and chloromycetin did not bring about desired response. Tetracyclines in the usual doses produced noticeable clinical improvement. Patient was discharged on a maintenance dose of 500 mg. tetracycline per day.

Discussion

The clinical diagnosis of this rare destructive disease usually does not pose much of a problem if the highly inflammatory nature of the lesions, their peculiar distribution in areas of predilection, the usual incidence in young males and frequent preceding history of acne vulgaris are kept in mind. The etiopathogenesis of this disease is even more obscure than that of acne vulgaris. The isolation of various pathogenic and non-pathogenic organisms has led to the belief that acne conglobata may be a true pyoderma of unknown pathogenesis. In the patient under study the isolation of pathogenic organisms and administration of appropriate antibiotics did not bring about the desired results. This and the fact that the lesions may sometimes be sterile helps discount the possibility of it being a true pyoderma. The response to tetracyclines, even when the organisms grown were resistant to tetracyclines, supports the view that it may be a suppurative variant of acne vulgaris[3,4] with coryenbecterium acnes playing an important role.

Our findings do not coincide with earlier observation of lowered level of gamma globulins in these patients[2]. Raised gamma globulin level is expected in any chronic inflammatory process as was found in the patient under report. T. and B. lymphocytes, blast transformation following PHA stimulation and intradermal responses to antigens which were within normal range prove that there is no deficiency of cell mediated immune response in this patient. This patient has not been observed long enough to comment about the rare possibility of secondary carcinomatous changes developing in the lesions, observed earlier[5,6].

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