ACRODERMATITIS CONTINUA OF HALLOPEAU – A REPORT OF A CASE

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INTRODUCTION

Pustular psoriasis is an uncommon complication of a common skin disorder and acropustulosis or acrodermatitis continua is a very rare manifestation.

Hallopeau in 1897 [1,2] described acrodermatitis continua as characterised by sterile, pustular eruption affecting the skin of the distal phalanges of the fingers and toes, which eventually led to destructive changes of the affected digits. The lesions are usually symmetrical and give rise to persistent erythematous, glazed area of skin. These on occasions developed into generalised pustular psoriasis (GPP). Subsequent crops of pustules produced nail dystrophy and eventual nail loss.

Degos [3] in 1967 recognised a form of palmo-plantar pustulosis which does involve the fingers and destroys the nails.

Resorption of the terminal phalanges and ankylosis of all distal and proximal interphalangeal joints may be a late complication. X-rays of the hands show extensive demineralisation of the bones. [4,5] We report a case of acrodermatitis continua of Hallopeau in a young man with a positive family history.

CASE REPORT

This 21-year-old Chinese male (THL) was first seen at the University Hospital in November 1981. The history dated back to about 11 years ago. He started to have pustules at the tip of his right thumb. This progressively increased in size to involve his whole thumb and nail bed resulting in spontaneous loss of his nails.

The lesions were confined to the right thumb for about 5 years, after which he developed similar pustular lesions on the ring finger after an accidental injury while at work. The finger-nail was subsequently lost.

Two to three years ago there was a progressive involvement of his other fingers with eventual loss of all finger-nails. He has had various treatments, both topical and systemic, but without much improvement.

Over the past 1 year, there was rapid progression of the pustular lesions to involve his upper limbs and trunk.

The lesions were characterised by exacerbations and remissions with the acute stage lasting 5-7 days. Remissions would last 2-4 weeks.

There is no consanguinity in his parents marriage. The pedigree (Fig. 1) shows that 3 other siblings are similarly affected.

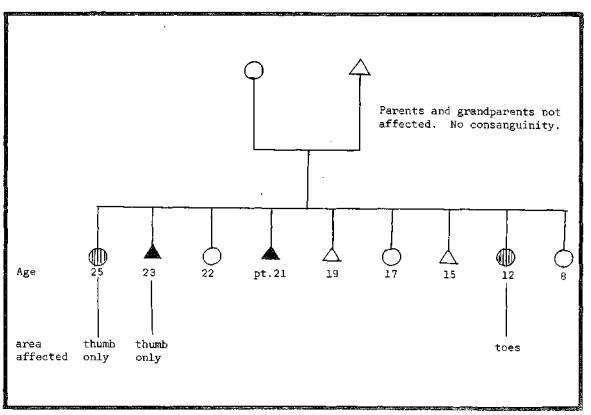

Fig. 1 Family history.

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Fig. 2 Extensive pustular erythematous lesions on glazed skin.

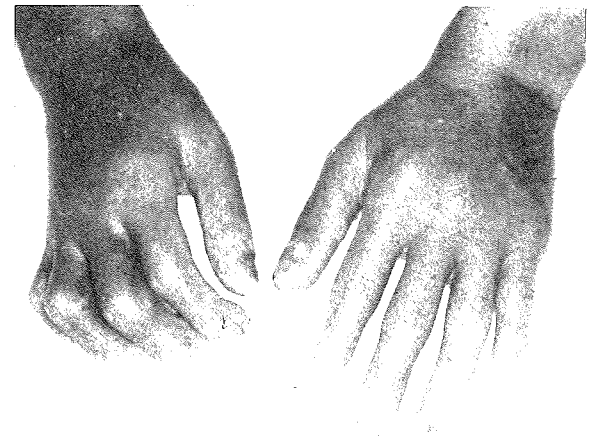

Fig. 3 Involvement of terminal phalanges with loss of nails.

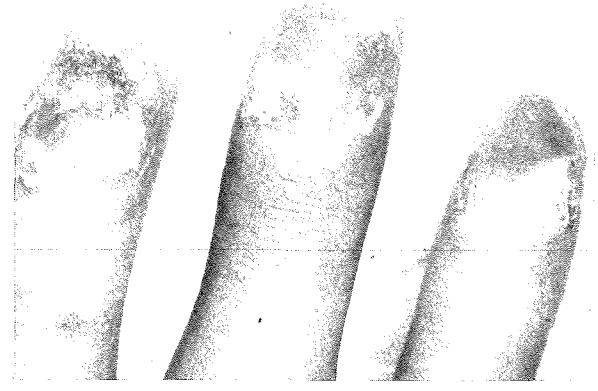

Fig. 4 Close up of fingers showing glazed thickened skin with involvement of terminal phalanges and loss of nails.

On examination, the patient had a low grade fever, he looked toxic.

Both hands showed extensive pustular erythematous lesions with scaling and glazed skin (Fig. 2). The finger-nails are all lost (Fig. 3). The right big toe is also involved with loss of nail.

On the trunk, there were pustular, erythematous, scaly lesions with underlying shiny glazed skin. All the finger-nails and toe-nails were lost. The skin of the fingers looked red, glazed, erythematous and thickened (Fig. 4).

All the other systems were normal. Full blood count was normal, erythrocyte sedimentation rate (ESR) 15 mm/1st hour. Liver function tests were normal. Swab obtained from the pustule sent for culture did not grow any organism. Blood cultures showed no growth.

A diagnosis of Acrodermatitis Continua of Hallopeau with a recent onset of pustular psoriasis was made. The patient was given daily coal tar bath, and weekly oral methotrexate (MTX) therapy. There was a dramatic response after 4-5 days (Fig. 5). The patient was maintained on weekly MTX, daily coal tar bath and betnovate ointment (1:4), until most of the lesions cleared, after which he was maintained on MTX fortnightly.

COMMENTS

Although acrodermatitis continua is an uncommon condition, there is reason to believe that it is on the increase, with the increasing incidence of generalised pustular psoriasis. This is related to the increasing use and availability of corticosteroids for the treatment of various diseases. It is a well known fact that systemic steroids is one of the provocating factors in the development of

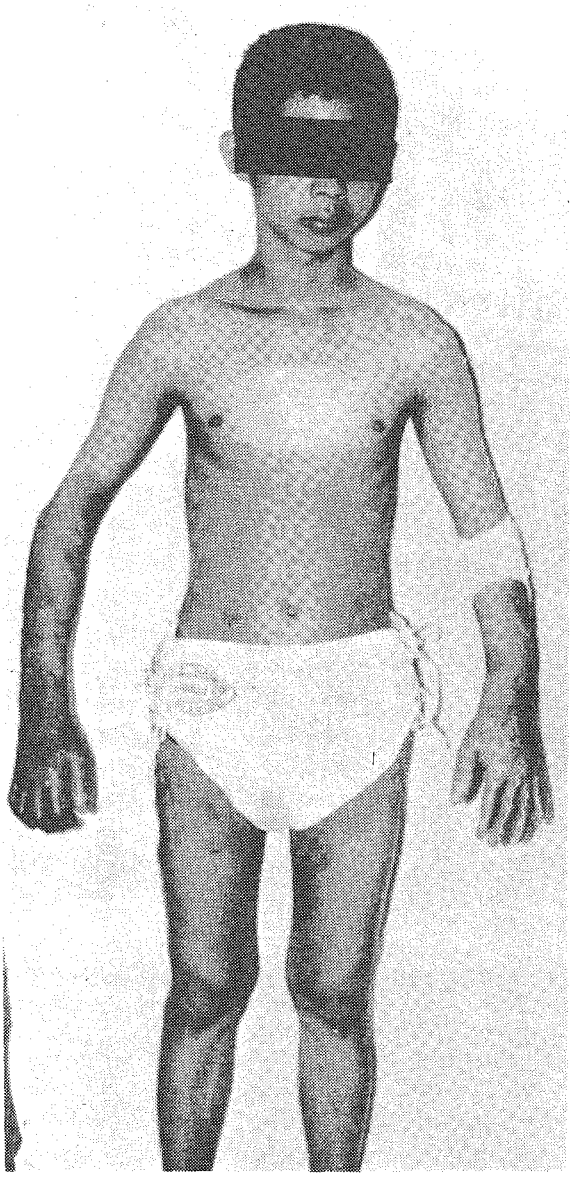

Fig. 5 Post treatment showing marked improvement with post inflammatory hyperpigmentation of the trunk and forearms.

generalised pustular psoriasis.

Our patient had a long history of localised acropustulosis involving the fingers and toes and only in the past 1 year did he develop GPP. Having had various treatments for his condition, it is very likely that his present relapse was due to the steroids that he had taken.

Another interesting point is that in our patient there is a positive family history of similar condition (see pedigree).

A spontaneous remission in GPP is common. When conservative treatment with blend topically applied therapy is ineffective, the treatment of choice is the antimetabolite methotrexate. [6,7]

ACKNOWLEDGEMENT

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