

striated osteopathy and often malformation are reported in the literature (3).

Focal dermal hypoplasia can present with negligible clinical features, as described previously (4, 5). In one of the two patients reported by Pujol the skin features were as in our patient, but in the other the diagnosis was made only after the women had undergone several miscarriages and had given birth to a baby girl with quite evident signs of Goltz syndrome.

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Verrucous-crusted Herpes Zoster in an Immunocompetent Patient

Sir,

We present a case of verrucous-crusted herpes zoster in an immunocompetent patient.

CASE REPORT

A 77-year-old woman was admitted to our Institute because of a suspected verrucous-crusted herpes zoster. The patient reported that 3 months previously she had been admitted to another hospital because of a herpes zoster of the ophthalmic branch of the left trigeminal nerve, accompanied by keratoconjunctivitis. The patient was treated with acyclovir cream (5 applications/day for 7 days), acyclovir ophthalmic ointment (5 applications/day for 7 days) and oral diclofenac (100 mg/day for 7 days). Clinical manifestations regressed after approximately 1 month. Some weeks later, however, new erythematous-vesicular lesions appeared at the same sites, suggestive of a recurrence of the previous herpes zoster, as well as ulcerative lesions in the cornea. The patient was treated with acyclovir cream, acyclovir and tobramycin ophthalmic ointments and atropine collyrium.

At the time of admission to our Institute, the patient presented with a verrucous-crusted lesion which was localized to the left fronto-parietal region, corresponding to the previous herpes zoster. The lesion was constituted by a single verrucous-crusted plaque, yellowish-brown in colour, with irregular and rugged surface (Fig. 1). The plaque was firmly adherent to the underlying surface and had a hard consistency. Partial removal of a portion of the plaque with 20% salicylic acid ointment revealed an underlying erythematous-erosive area.

Left eyelids were erythematous-oedematous; furthermore, purulent conjunctivitis was visible. The cornea was diffusely oedematous and with a wide central ulcer. The patient complained of burning and pain. General physical examination did not reveal anything pathological.

Laboratory tests showed leukocytosis (15.700 WBC/mm^3) and increase in ESR (60 mm at the first hour). Only anti-varicella-zoster virus (VZV) IgG was positive.

Cytological examination, carried out on the eroded area under the verrucous-crusted lesion, showed the presence of numerous giant and multinucleated keratinocytes. Instrumental investigations were negative.

The patient was treated with intravenous acyclovir (5 mg/kg 3 times a day for 7 days) and oral diclofenac (100 mg/day for 10 days). As



Fig. 1. Verrucous-crusted herpes zoster.

far as the keratoconjunctivitis is concerned, the patient was treated with atropine collyrium and acyclovir ophthalmic ointment (5 applications/day for 10 days). Complete resolution of cutaneous lesions and pain was observed within 2 weeks. No recurrences were observed in a 12-month follow-up period.

DISCUSSION

At least three clinical varieties of herpes zoster have been described up to now. Bullous herpes zoster is characterized by blisters which may appear *d'emblée* or by coalescence of multiple vesicles. Ulcerative-necrotic-gangrenous and verrucous-crusted (hyperkeratotic) herpes zoster are observed almost exclusively in immunodepressed patients, particularly because of HIV infection (1–8).

From a clinical point of view, verrucous-crusted herpes zoster is characterized by the slow but progressive development of verrucosities and crusts. Histologically, apart from the typical herpes zoster picture, the lesions present an epidermal and adnexal pseudo-carcinomatous hyperplasia with marked

hyperkeratosis (1–8). These histopathological findings suggest that verrucous-crust herpes zoster might represent an over-response to a chronic infection by VZV. The appearance of verrucous-crust herpes zoster in an immunocompetent patient is an event which, to our knowledge, has never been reported in the literature. In the case we have described, the only hypothesis that can be put forward is that of a VZV infection that became chronic-recurrent as a result of an incorrect therapy: in fact, the patient was previously treated only with topical acyclovir. In immunodepressed patients, the most frequent cause of verrucous-crust herpes zoster is represented by a resistance to acyclovir (1–8). This hypothesis is not plausible in our patient, since therapy with acyclovir by the intravenous route resulted in a rapid, complete and long-lasting resolution of skin lesions.

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Erythema Annulare Centrifugum Associated with Pregnancy

Sir,

Erythema annulare centrifugum (EAC) or gyrate erythema starts as erythematous papules or plaques that expand in a centrifugal pattern. The centre of the expanding lesion consists of somewhat hyperpigmented skin and the edge of the lesion has trailing scale behind the advancing border. The condition has been categorized into superficial and deep variants. Vesiculation is rare. The pathogenesis of EAC is not fully understood, but it is thought to represent a cutaneous hypersensitivity to diverse causes (1, 2). Here we report a case of EAC associated with pregnancy.

CASE REPORT

A 27-year-old Thai woman presented in the 36th week of pregnancy with a 3-week history of skin eruptions on the abdomen and extremities. The skin lesions began with asymptomatic erythematous papules before spreading gradually to form large rings. She was otherwise well and this was her first pregnancy. She took only iron supplement during pregnancy.

Cutaneous examination revealed erythematous polycyclic lesions with central clearing and trailing rim of fine scale on the abdomen, forearms and legs (Fig. 1).

A potassium hydroxide examination was performed and a negative result obtained. Histology of a biopsy specimen from the edge of skin lesion showed a dense perivascular lymphocytic infiltrate in the upper dermis. Direct immunofluorescence was negative for IgG, IgA, IgM, C_{1q}, C₃, C₄ and fibrinogen. The results of the following laboratory investigations were normal: complete blood count, urinary analysis,

serum urea nitrogen, creatinine, liver function test, VDRL and antinuclear antibody.

A diagnosis of EAC was made. One week later she was hospitalized and delivered a healthy baby, weighing 2460 g, whose general condition was good. The improvement of the eruption was noted after delivery. Within 3 days, all skin lesions had almost disappeared. No evidence of recurrence was seen after 6 months.

DISCUSSION

There are several reports of EAC in association with a variety of underlying disorders, including infection (bacterium, virus, fungus or parasite), drugs (salicylates, chloroquine, hydrochlorothiazide or penicillin), blue cheese *Penicillium* and neoplasm (1–4). Unfortunately, the evidence for these associations is based on one or only a few patients. Two aetiological factors, including cancer and dermatophytes, are more significant in that they have been reported much more frequently. In addition, there is experimental evidence to suggest dermatophytes as a cause of EAC (1). Transformation of a *Trichophyton* intradermal skin test into a typical EAC was described. The tumours associated with EAC may be solid or haematologic, benign or malignant. EAC resolved following successful treatment of the neoplasia and recurrence of EAC was noted concurrently with tumour relapse (5). However, the rapid resolution of EAC post-delivery in our patient suggests a causal relationship. To our knowledge, no case of EAC has been reported in association with pregnancy. Kelly et al. (6)