

Juvenile Plantar Dermatitis (JPD)

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JPD is a frictional contact dermatitis of the forefoot to which atopics are prone but it also occurs in susceptible non-atopics. 189 affected individuals have been studied between 1973-1988.

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The term JPD (1) indicates a condition which usually begins over the plantar aspect of the big toes and then spreads to other toes and to the forefoot sole; toe spaces are unaffected but the heel may be involved. The condition has been described by others (2-7). Clinically there may be itching, red, dry, peeling, cracked, sore, painful, burning, bleeding, shiny skin and difficulty in walking.

MATERIAL AND METHODS

189 affected individuals (M=108, F=81 (M:F 1.3:1)) have been seen and studied personally.

FINDINGS

A study of 189 patients (1973-1988). M=108, F=81 (1.3:1). Age range of onset: Birth-18 years (6 were <1 year). Age range when seen: 15 months-18 years 9 months. Mean age at onset: 6.8 yrs (M=6.5/F=7.2). Mean age when seen: 9.6 yrs (M=9.2/F=10.0).

Distribution apart from forefoot. 42/189 (22.2%) showed heel involvement.

Six pairs of siblings. This is a measure both of the high incidence of JPD plus what happens if you examine siblings! It neither indicates infectivity nor that JPD is a genodermatosis.

Month of referral.

Jan	Feb	Mar	Apr	May	June
14	19	12	20	15	15
July	Aug	Sept	Oct	Nov	Dec
17	24	10	12	16	15

Number of JPD patients seen each year (1977-88).

77	78	79	80	81	82	83	84	85	86	87	88
16	24	14	16	34	13	16	6	9	9	8	4 (up to 30 April)

Prognosis. A self-limiting condition, mean duration 7-8 years.

JPD and ATOPY.

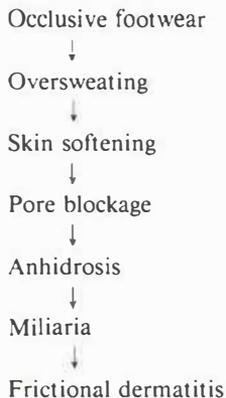
Personal history of atopy	46 (24.3%)
Atopy in parent and/or sib	51 (27.0%)
Atopy in any relative	74 (39.2%)
Personal history and/or parent and/or sib	82 (43.4%)
Personal history and/or any relative	95 (50.3%)

Relationship to atopy. 95 (50.3%) of 189 patients seen since 1973 had a personal and/or family history of atopy. JPD may occur before, after, or at the same time as typical atopic dermatitis elsewhere. However, JPD behaves independently. Atopic dermatitis may also affect the foot of course, but can usually be distinguished from JPD as can allergic contact dermatitis.

DISCUSSION

It seems probable that the sequence of events in JPD is as illustrated below.

Juvenile plantar dermatosis



The basic requisite is occlusive footwear but it is unclear why the condition is self-limiting and why it predominates in juveniles. Leather shoes, open-toed shoes, cotton socks and emollients such as yellow soft paraffin and 10% urea in a cream are often helpful. Follow-up of patients has been described in many contributions (8–10).

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