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The Pattern of Common Childhood Dermatoses in Ibadan

G. O. ALABI

Department of Medicine, University College Hospital, Ibadan.

Summary

Alabi, G. O. (**1980**). *Nigerian Journal of Paediatrics* **7**(**2**), **39. The Pattern of Common Childhood Dermatoses in Ibadan**. 128 children were seen out of a total of 1,408 patients in the Dermatology clinic, University College Hospital, Ibadan, from January, 1970–December, 1971. The commonest paediatric skin condition in the present series was infantile eczema constituting 25 per cent of the cases. The eczema was common among children in the upper socio-economic group, while infections formed the bulk of skin ailments seen in the low income class. It is suggested that climate and environmental sanitation jointly play a part in determining the incidence of many skin diseases.

THE incidence of paediatric dermatological problems varies from one part of the world to another. The prevalence of skin diseases in Africans has been reported to be about 16 per cent of all diseases and therefore similar to the prevalence in Europeans (Clarke, 1959). However, very little has been written about skin conditions in infancy and childhood in Africa.

This paper reviews the common skin diseases seen among Nigerian children attending the Skin Clinic, University College Hospital (UCH), Ibadan.

Materials and Methods

Skin disorders in children under the age of 10 years attending the skin clinic during the period, January 1970–December 1971 were reviewed. Diagnosis in most of the cases was based on the history and physical findings, but where necessary, bacteriological, mycological and histological confirmation was undertaken. Excluded from the review were exanthemata and dermatoses associated with kwashiorkor and other malnourished states.

Because a large number of dermatological problems are treated in the General Outpatient (GOP) clinic of the hospital, and may not therefore be referred to the dermatology clinic, an analysis of dermatological problems in the same age group seen in the GOP clinic during a 3-month period was also undertaken for comparison.

Results

During the 2-year period, 1,408 patients attended the dermatology clinic. Of these, one hundred and twenty eight were in the age group under consideration. The different types of skin problems in these one hundred and twenty-eight children are listed in Table I. The commonest condition was infantile eczema which occurred in 32 (25 per cent) of the 128 children. The ages of these 32 children (20 males and 12 females) ranged between four months and six years. The

TABLE I

Types of Skin Diseases in 128 Children attending the Dermatology Clinic

Type	*No. of Patients*	*Per cent of Total*
Infantile eczema	32	25.0
Acute bacterial infections (Impetigo, folliculitis, furunculosis)	28	21.9
Tinea capitis	16	12.5
Naevi (cavernous hemangioma, epithelial naevus, hairy naevus, neurofibromatosis)	14	10.9
Virus infections (Verruca vulgaris and molluscum contagiosum)	10	7.8
Scabies	6	4.7
Lichen Planus	4	3.1
Follicular keratosis	4	3.1
Albinism	3	2.3
Leprosy	2	1.5
Vitiligo	2	1.5
Miscellaneous	7	5.7
Total	128	100.0

eczematous lesions were confined to the face in two cases and to the extremities in twenty other cases. The face and the extremities were involved in six cases, while multiple sites were affected in the remaining twenty-two cases. Family history of eczema was positive in two parents and one sibling of the eczematous children, while three other siblings had asthma. Ten (31 per cent) of the thirty-two children were from the high income group of the population (University lecturers, Accountants, Lawyers, Engineers), while the rest belonged to the middle income group (clerks, students, skilled artisans). Eczema was not seen in children of the low income group (labourers).

Other common conditions in the series were bacterial, fungal, and viral infections of the skin which together constituted 42.2 per cent of the cases, and naevi which was present in nearly 11 per cent of the children. Less common were scabies, lichen planus, albinism and follicular keratosis. The miscellaneous conditions constituting 5.5 per cent of the series included erythema multiforme, pityriasis rosea and various cutaneous eruptions due to drug allergy.

In the GOP clinic, two hundred and seventy out of a total of five hundred dermatological patients seen over a period of three months were children (Table II). The commonest condition

TABLE II

Types of Skin Diseases in 270 Children seen at the GOP

Type	*No. of Cases*	*Per cent of Total*
Impetigo	90	33.4
Tinea	70	26.0
Multiple leg ulcers	35	13.0
Candidiasis	28	10.4
Boils (Folliculitis and furunculosis)	19	7.0
Scabies	18	6.6
Infantile eczema	10	3.6
Total	270	100.0

was impetigo, present in ninety (33.4 per cent) out of the two hundred and seventy cases. There were fifty-four (20 per cent) of other pyogenic skin infections; seventy cases (26 per cent) of ringworm; twenty-eight cases (10.4 per cent) of candidiasis and eighteen cases (6.6 per cent) of scabies. Eczema was less common than in the dermatology clinic; it occurred in only ten (3.6 per cent) of the two hundred and seventy patients.

Cultures from the septic lesions yielded mainly *staphylococcus pyogenes* and *B-hemolytic streptococcus* in about equal frequency, though other organisms such as *staphylococcus albus* and *E. coli*, occasionally occurred. It was interesting to note that only in those patients with *B-haemolytic streptococcus* did we find increased values of antistreptolysin-O titre.

Discussion

This review has revealed differences in the patterns of dermatological conditions seen in a specialist clinic compared with those in a busy general practitioner's clinic. While the commonest condition in the dermatology clinic was infantile eczema, in the GOP Clinic, impetigo was the commonest condition seen. One possible explanation for the disparity is that the prolonged treatment required for eczema is better handled in the consultant clinic, whereas, with the easy availability of antibiotics, the impetigos can be easily treated by the general practitioner.

Among the thirty-two cases of infantile eczema seen in the dermatology clinic, there were twelve infants, ten children between 1 and 2 years of age, and 10 other children, 2–6 years of age. Sixty-three per cent of the children were males. It may be concluded that most cases of infantile eczema in this small series occurred under 2 years of age, and boys were more affected than girls. The condition also tended to occur in multiple sites.

The preponderance of eczema in children of high income group requires some special comment. Diet may be partly responsible, because all the affected children had been fed on artificial milk during infancy. Among the caucasians, infantile eczema occurs in all classes of the society, and it is common practice for the children to have been fed solely on artificial milk, though only about 3 per cent of all such children develop infantile eczema (Walker and Warin, 1956). In our population, artificial feeding is most often practised by the affluent members of the society.

The incidence of infantile eczema in this study represents about 3 per cent of all skin cases seen here at all ages of life. This incidence is much higher than the incidence of 1.8 per cent previously reported from the same institution (Shrank and Harman, 1966), but compares favourably with reports in negroes in the USA (Kenney, 1965) and black West Indians in London (Davis, Marten and Sarkany, 1961). A positive family history of atopic manifestations (atopic eczema, asthma or hay fever) in the present study was only 20 per cent, while in some other parts of the world, a positive family history is reported to be about 70 per cent (Davis, Marten and Sarkany, 1961; Rook, Wilkinson and Ebling, 1968). No other explanation besides racial factors can be adduced for these differences.

The high incidence of bacterial infections in the present series (25 per cent) may be attributed to the low standard of personal hygiene, as well as to the heat and humidity of the climate. However, with improved personal hygiene, health education and ready access to antiseptics, the incidence of skin sepsis will decline. This view is supported by the fact that fifteen years ago when medical facilities were less adequate than now, skin infections accounted for 60 per cent of the patients attending the dermatology clinic in Lagos (Clarke 1959). Similarly in UCH, Ibadan, the incidence of skin infections was 30 per cent of all skin cases ten years ago (Shrank and Harman, 1966) while in the present series skin infections accounted for 25 per cent of all dermatological cases seen in all ages of life. It is also a common experience that there is a lower incidence of sepsis in the upper socio-economic group whereas among the low income group, the incidence of sepsis is high.

The 4.7 per cent incidence of scabies in the present series is much lower than the 11 per cent incidence in Nigeria reported by Clarke a decade ago (Clarke, 1962). This might be due to improvement in the standard of the community, but could also be due to our restriction of the diagnosis of scabies to only lesions in which the acarus was found. Fungus infections were mainly *Tinea capitis* due to *Microsporum audouini*. These occurred commonly in school children, as did the viral warts (verruca vulgaris) which affected mainly the hands, though occasionally, plantar warts were seen.

The incidence of naevus in the present series (11 per cent) is much less than the 40–60 per cent incidence reported in caucasian children (Rook, Wilkinson and Ebling, 1968). This difference defies any adequate explanation besides racial factors.

Lichen planus in the present series tended to be widespread on the body just like in adults and the response to corticosteroids was always dramatic. The series did not reveal any sex predisposition; of our four patients, two were boys, and two were girls.

The presence of leprosy in two children both aged seven years would suggest that the incubation period of leprosy is at least under seven years.

The age pattern of the dermatoses seen in the general outpatient clinic is also interesting. Over 50 per cent of the patients were under 10 years of age and they presented mainly with bacterial infections. This is comparable to the findings by Shrank (1965) who in his field survey found that 41 per cent of the patients were under 10 years of age.

From the present study, it is evident that the medical practitioner in Nigeria at present is confronted mainly with infective conditions, and this is more true of skin ailments. The prevalence of infantile eczema in children of the upper socio-economic group, and of infective dermatoses in the lower socio-economic class, would suggest that environmental and economic factors play the predominant role in determining the incidence of some skin diseases in Nigeria. There is the hope however, that with improvement in the private and public hygiene of the community, the incidence of sepsis will fall, and one would, in future, see more of the chronic dermatoses like eczema and the disorders of pigmentation.

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