DEMODECTIC DISEASE IN HUMAN BEINGS (A report of two cases)

S. N. PHADKE,* D. K. GUPTA † AND J. C. GUPTA ‡

Summary

Two cases of Demodicidosis resembling Acne resacea and Pityriasis alba respectively are described. The significance of mite-load and response to antiparastitic treatment are discussed with reference to a short review of literature.

Introduction

A frequent association of Demodex folliculorum mite with some of the scaly disorders of the skin resembling pityriasis alba, and also rosacea has been reported in the past1-3. Ayres4, however, finally ascribed a definite pathogenic status to this parasitic mite under the descriptive term of 'Pityriasis folliculorum (Demodex)'. Ayres and Ayres⁵ further emphasized the possibility of encountering an occasional parasite in the scrapings from a random lesion on the face or even from normal skin of the face in adults and believed that the etiologic role of this mite is based on quantitative rather than qualitative considerations. They also evolved a workable method of recording parasitic load of a lesion grading 10 or more mites in one slide preparation as 4+.

Two cases seen in our O. P. D. satisfied the above criteria for the patho-

genic role of demodex folliculorum. The diminution and disappearance of the parasites paralleled clinical improvement and cure in both these cases. This has prompted us to report the cases since no such case report could be traced in the available literature from our country.

Case Reports

Case 1:—A 50 year old army officer reported to the Dermatology outpatient department in December 1974. He complained of a burning and itching lesion of about 3 months duration on his right cheek. Clinical examination revealed an area of diffuse mild flushing, 5 cm. x 3 cm. in size, overlying the maxillary prominence and extending medially to the side of the nose. The lesion consisted of barely perceptible papules with scaling. On closer examination, the papules were found to represent the raised hair follicles. A provisional diagnosis of Acne-rosacea was made.

Scrapings were taken from the lesion so as to express the contents of the follicles. A wet preparation of these scrapings in 10% potassium hydroxide, under the microscope, revealed a large number of Demodex

^{*} Lecturer in Pathology,

[†] Reader and Head of the Department of Dermatology and Venereology,

[†] Professor and Head of the Department of Pathology and Microbiology, Medical College and Associated Hospitals Jabalpur, (M.P.)

Received for publication on 14-8-1976

folliculorum mites. As many as 18 to 21 were counted in each preparation (Fig. at Page No. 110).

During objective interrogation, the patient volunteered the information that while on field duty, he had not cared to clean his face regularly and that he had not used soap on his face for a few months.

Topical treatment with 1% Gammexane lotion relieved the patient of his symptoms within a week. Further application of the same lotion for another three weeks cured the patient completely. No parasite could be demonstrated after a month in the scrapings from the area of involvement.

Case 2

A 20 year old male medical student. attended Dermatology out patient department in February 1976, with the complaint of a slightly itching scaling area of hypopigmentation on the right side of the face. The lesion had been gradually increasing in size for the previous one month. On clinical examination, the lesion was found to be linear, 7 cm. x 2 cm. in size, extending between the tragus and the hair line down to the angle of the jaw. There was scaling and slight follicular prominence but no erythema in the area of involvement. The lesion closely resembled Pityriasis alba.

Scrapings from the lesion cleared in 10% potassium hydroxide revealed under the microscope, a large number 4. of Demodex foliculorum mites, mature and immature forms, making up to twenty two in one preparation.

This patient also readily responded to the treatment with 1% Gammexane lotion and was cured of the disease within a fortnight. No parasite could be found in subsequent scrapings.

Comments

Occurrence of an occasional Demodex folliculorum mite is a common place finding while examining scrapings from lesions on the face. However, in the present instance, the parasitic load was distinctly indicative of its pathogenic role in producing the lesions. Lack of practice of cleaning the face with soap and water, as a predisposing cause, could be elicited in one of the two cases. It may be a coincidence that both our patients have been males while most of the authors 5, 6 have reported 'demodicidosis' to be preponderant in the females. That our cases were promptly relieved by topical use of 1% Gammexane lotion is in conformity with the observations of other authors4,5,6.

Acknowledgment

Our thanks are due to the Superintendent, Medical College Hospital, and the Dean, Medical College, Jabalpur for permitting us to publish this article.

REFERENCES

- Lawrence H: The Pathogenicity of the Demodex (Owen) in Human-beings, MJ Australia, 2: 39, 1921.
- Dubreuilh: Diseases of the skin, ed 9th, Philadelphia WB Saunders Company, 1921 p 1258.
- Kaufmann-Wolf M: Concerning the usual presence of Demodex Folliculorum in the Pustules of Acne Rosacea, Dermat Wchnschr, 81: 1095, 1925.
- Ayres S Jr: Pityriasis Folliculorum (Demodex), Arch Dermat and Syph, 21:19 1930.
- Ayres SJr and Ayres S III: Demodectic Eruptions (Demodicidosis) in the Human, Arch Dermat, 83: 816, 1961.
- d Ayres S Jr and Mihan R: Rosacea-Like Demodicidosis Involving the Eye lids, Arch Dermat, 95: 63, 1967.