INFECTION OF THE GLABROUS SKIN INSTIGATED BY THE FUNGUS TRICHOPHYTON SULFUREUM

REPORT OF A CASE
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Trichophyton sulfureum as the instigator of a cutaneous eruption is catalogued, on this continent, within the assemblage of mycologic rarities.

Such competent observers as Lewis and Hopper (1) report having encountered only two examples of clinical infection caused by this organism, and there is a corresponding dearth of references in the literature. It is known, however, that this fungus may excite varied superficial clinical manifestations. Tinea capitis, lesions of the eyebrows and a cutaneous eruption have been described.

Hairs infected by this organism contain large endothrix spores aligned in linear fashion, while skin scrapings demonstrate filaments not distinctive from those associated with other superficial mycoses. Of considerable assistance in identification of Trichophyton sulfureum, and earmark of the colony, is the sulfur yellow color from which is derived the descriptive appellation. Chlamydospores, immature fuseaux and abundant microconidia characterize the culture mount but are not distinctive as regards identification.

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Y. A., a four-year old white farmer's daughter, was referred to the University Hospital on November 21, 1946.

Two weeks preceding her first visit to the Clinic, the mother had noticed a quarter-sized erythematous plaque on the child's right knee. During subsequent days this lesion increased considerably in size, and on November 18, there developed in addition, a disseminated, mildly pruritic efflorescence consisting of minute erythematous papules.

Physical examination was normal with the exception of the cutaneous eruption. On the right knee was an oval plaque approximately 6 x 9 cm. in size. The lesion was erythematous, had a slightly elevated border studded with vesicles and was covered with considerable crust (fig. 1). On the scalp, face, neck, trunk and extremities was an eruption characterized by discrete and confluent match head to pea-sized erythematous papules, some of which were surmounted by a tiny vesicle.

Scrapings from the initial plaque on the knee demonstrated an abundance of filaments. Numerous successive cultures from the same site resulted in a typical growth of Trichophyton sulfureum, with findings as previously described for this organism. Repeated and protracted study of material from widely divergent papules and dried vesicles on other parts of the integument did not demonstrate evidence of fungi. A skin test employing 0.01 cc. of trichophyton showed an erythematous zone, with central wheal, approximately 3 cm. in diameter after 48 hours. Topical therapy employing undeceylenic acid compounds and directed to the primary lesion exclusively, resulted in disappearance of the entire eruption within fourteen days. Source of the infection was not determined despite a diligent and assiduous investigation of siblings, livestock and environs.

SUMMARY

A glabrous skin infection instigated by the fungus Trichophyton sulfureum and accompanied by an extensive trichophytid is described.

REFERENCES