Authors' reply

Sir,

We thank the correspondent for the interest shown in our article discussing various therapeutic options for the treatment of dermatophytosis.[1] The letter has alluded to a specific situation where patients with dermatophytosis are treated with parenteral long-acting steroids with resultant low serum cortisol levels and altered presentation of the disease and asks us to provide a guideline for managing them.[2] We presume that the correspondent has read part I of our review where similar observations, but not limited to low serum cortisol levels, have been discussed briefly in the section entitled 'Iatrogenic Cushingoid syndrome in patients of tinea.'[3] However, we have deliberately desisted from attempting to provide management guidelines for parenteral steroid-induced complications, especially those resulting in iatrogenic Cushing syndrome or its incomplete form, because we consider it beyond the dermatologists' domain and, therefore, not within the broad ambit of the review. In fact, we would consider it imprudent for a dermatologist alone to treat such patients who are in obvious need of an endocrinology referral and would strongly advocate the latter for initial guidance. Questions raised in the letter regarding the method of weaning the patient off steroids, while instituting antifungal therapy, likewise, cannot be answered at present due to the absence of endocrinologists in the team of authors of the review. A lack of published data in the form of well-designed controlled studies makes it difficult to answer questions regarding modification of systemic and topical antifungal regimen. A recently published study describes 23 patients of widespread dermatophytosis with classic symptoms and signs of iatrogenic Cushing syndrome resulting from treatment with oral or parenteral steroids.[4] There is also an isolated case report describing the development of iatrogenic Cushing syndrome with erythrodermic tinea corporis in a pediatric patient.[5] In both the articles, the emphasis is on the misuse of systemic steroids in the treatment of widespread and recalcitrant dermatophytosis. To the best of our knowledge, there is a glaring dearth of literature regarding management of patients of dermatophytosis presenting with iatrogenic Cushing syndrome that we can cite for the benefit of the readers. Thus, we hold that such situations need to be managed on a case-to-case basis. We recommend an approach including taking detailed history of topical/systemic steroid and antifungal use; measurement of weight, height and blood pressure; a thorough cutaneous and systemic examination; and, routine haematology and biochemical investigations including 8 am and 4 pm serum cortisol levels, plasma glucose levels in fasting state as well as two hours following 75 g of glucose load and serum electrolytes. The dose and duration of antifungal therapy should also be decided on a case-to-case basis, giving due consideration to the age, weight, comorbidities and relevant drugs being given to manage them. Extending the duration of the oral antifungal by at least two weeks and that of topical therapy by at least four weeks beyond clinical clearance is a reasonable approach. Ascertaining mycological clearance is ideal in such cases and should be done whenever feasible. In the case of itraconazole, a longer duration of therapy with due monitoring is more rational than increasing the dose beyond 200 mg/day as the drug follows nonlinear pharmacokinetics and a higher dose logically increases the risk of side-effects.[1]

At present, measures we consider essential in managing such patients include correcting the underlying hypothalamic-pituitary-adrenal axis suppression in consultation with the endocrinologist, complete avoidance of topical corticosteroids, symptomatic relief with antihistamines, prolonged appropriate antifungal therapy with due monitoring, ensuring compliance to treatment, correction of the underlying comorbid factors, simultaneous treatment of contacts and prevention of fomite spread. We look forward to reading recommendations borne out of well-designed collaborative studies between dermatologists and endocrinologists to manage this subset of patients.

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Conflicts of interest

There are no conflicts of interest.

Shyam B. Verma, Saumya Panda[1], Pietro Nenoff[2], Archana Singal[3], Shivaprakash M. Rudramurthy[4], Silke Uhrlass[2], Anupam Das[5], Kavita Bisherwal[6], Dipika Shaw[4], Resham Vasani[7]

Department of Dermatology, Nirvan Skin Clinic, Vadodara, Gujarat, [1]Department of Dermatology, Belle Vue Clinic, Kolkata, West Bengal, India, [2]Department of Dermatology and Laboratory Medicine, Laboratory of Medical Microbiology, Moelbis, Germany, [3]Department of Dermatology and STD, University College of Medical Sciences and GTB Hospital, New Delhi, India, [4]Department of Medical Microbiology, Post Graduate Institute of Medical Education and Research, Chandigarh, India, [5]Department of Dermatology, KPC Medical College and Hospital, Kolkata, West Bengal, India, [6]Department of Dermatology, Venereology and Leprosy, Lady Hardinge Medical College and SSK Hospital, New Delhi, India, [7]Department of Dermatology, Bhojani Clinic, Matunga, Mumbai, India

Corresponding author:
Dr. Resham Vasani,
Department of Dermatology, Bhojani Clinic, Matunga, Mumbai, India.
dr.resham@gmail.com

References

1. Verma SB, Panda S, Nenoff P, Singal A, Rudramurthy SM, Uhrlass S, *et al*. The unprecedented epidemic-like scenario of dermatophytosis in India: III. Antifungal resistance and treatment options. Indian J Dermatol Venereol Leprol 2021;87:468-82.
2. Chakraborty A. Need for modification of guidelines for systemic steroid-modified tinea. Indian J Dermatol Venereol Leprol 2021; doi: 10.25259/IJDVL_956_2021
3. Verma SB, Panda S, Nenoff P, Singal A, Rudramurthy SM, Uhrlass S, *et al*. The unprecedented epidemic-like scenario of dermatophytosis in India: I. Epidemiology, risk factors and clinical features. Indian J Dermatol Venereol Leprol 2021;87:154-75.
4. Thakran P, Agrawal S, Singal A, Verma S, Madhu SV. Iatrogenic Cushing's syndrome in patients with superficial dermatophytosis. Indian Dermatol Online J 2021;12:237-43.
5. Kapadia F, Naskar S, Chikhalkar S, Kharkar V. Erythrodermic tinea corporis with iatrogenic Cushing's syndrome. Eur J Pediatr Dermatol 2021;31:178-80.