

## Utility of Wood's Lamp in Intertrigo

Sir,

Intertrigo is caused due to friction on opposing skin surfaces in adjunct with moisture trapped in the skin folds. It presents as chronic erythematous desquamation associated with malodor, maceration, variable edema, and vesiculopustular lesions. Associated symptoms include burning, pruritus, or pain.<sup>[1]</sup> We report a case of gram-negative toe web infection wherein Wood's lamp proved as a noninvasive and cost-effective diagnostic modality, helping in early and accurate diagnosis.

A 52-year-old male presented with pruritic macerated superficial erosion of the first interdigital space of the right foot for 6 months duration. The affected area was sharply demarcated from the normal skin and showed maceration with reddish granulation tissue at the base [Figure 1a and b]. There were no satellite lesions. The nail of the great toe appeared dystrophic. The patient was treated with antifungals (tab fluconazole and topical sertaconazole) with a provisional diagnosis of erosio interdigitalis blastomycetica. Other differentials included causes of nonhealing erosions such as cutaneous tuberculosis, leprosy, chronic insult dermatitis, and ulcerative lupus vulgaris. No clinical improvement was seen after 2 weeks.

Before culture was sent, we conducted few bedside tests including a 10% potassium hydroxide (KOH) mount and Wood's lamp. The former was negative, however, surprisingly Wood's lamp showed a clear greenish

fluorescence over the lesional area with patchy coral-red fluorescence [Figure 2a]. Greenish fluorescence on Wood's lamp indicates tinea pedis and *Pseudomonas* infection.<sup>[2]</sup>

Since KOH ruled out tinea pedis, a diagnosis of mixed *Pseudomonas* and *Corynaebacterium* (coral red fluorescence) was made. The diagnosis was confirmed by *Pseudomonas* sps. growth on culture. The patient was started on oral ciprofloxacin 500 mg BD and topical nadifloxacin for 10 days, after which there was distinct clinical improvement [Figure 2b]. The patient was advised to keep the feet dry by using talcum powder.

Such clinical presentations have been reported with other gram-negative bacteria including *Pseudomonas*<sup>[3]</sup> and also *Corynaebacterium*.<sup>[4]</sup>

*Pseudomonas* exhibits greenish fluorescence due to the pigment pyoverdin (or fluorescein).<sup>[5]</sup> Our case demonstrates the unfamiliar but handy use of Wood's lamp in the diagnosis of chronic erosions, sparing the need for more complex time consuming, and expensive modalities-like culture.

### Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not



Figure 1: (a) Maceration in the first interdigital space of the right foot. (b) Plantar aspect of the interdigital space

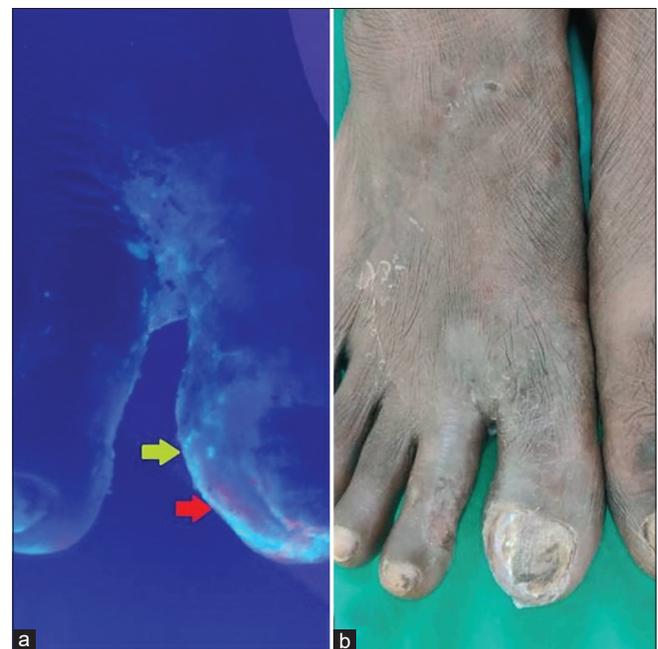


Figure 2: (a) Greenish fluorescence (green arrow) in the lesional skin with patchy red fluorescence (red arrow). (b) Visible reduction at end of 10 days

be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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### **Conflicts of interest**

There are no conflicts of interest.

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