

## Wood's Lamp as an Inexpensive, Handy Tool to Diagnose Solar Urticaria

A 55-year-old female patient presented with history of itchy, red skin lesions on exposure to sunlight for past 2 years. Lesions used to develop over exposed parts of body after 10-15 minutes of sun exposure and used to subside on their own within 20-30 minutes of staying indoor. There was no history of associated pain, blistering, and any systemic complaint. There was no seasonal variation. She was not taking any medications with a photosensitizing potential. On examination, patient was noted to have well-demarcated erythema over medial aspect of left forearm with clear cut demarcation over flexures and areas protected by bangles [Figure 1a and b]. On the basis of above clinical features, she was suspected to have solar urticaria. To confirm the diagnosis and causative spectrum, we irradiated patient's upper back with Wood's lamp for 15 minutes, which resulted in itching and erythema over the irradiated area [Figure 2]. Routine investigations including hemogram, urine examination, liver and renal function tests were within normal limit. Antinuclear antibody was negative. We, therefore,



**Figure 1: (a and b): Well-demarcated erythema over medial aspect of forearm with demarcation over flexures and areas protected by bangles**

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labeled the case as primary solar urticaria and treated her with antihistamines and photoprotection using appropriate clothing and physical sunscreen.

Solar urticaria is an uncommon form of physical or inducible urticaria. Patients can be sensitive to ultraviolet (UVA, UVB) or visible wavelengths of the solar spectrum. Diagnostic tests include phototesting using solar simulator and monochromator light testing to determine specific wavelengths causing the disease.<sup>[1,2]</sup> However, in the Indian scenario, these tests are not feasible in view of high cost and lack of availability of the required equipment, even at tertiary care centers.

UV radiation produced by the Wood's lamp is generated by Wood's filter, which is selective for wavelengths in the UV part of the spectrum between 320 nm and 400 nm with a peak at 365 nm.<sup>[3,4]</sup>

Because UVA radiation is commonly implicated in the pathogenesis of solar urticaria,<sup>[5]</sup> we utilized Wood's lamp as a diagnostic tool and got positive results. Unfortunately, with the availability of newer investigative equipments, the practical utility of Wood's lamp in dermatology clinics has declined considerably. Though, it is not possible



**Figure 2: Erythema over back developed after irradiation with Wood's lamp**

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**Sanjiv Choudhary,  
Ankita Srivastava**

*Department of Dermatology,  
All India Institute of Medical  
Sciences, Nagpur, Maharashtra,  
India*

### Address for correspondence:

*Dr. Sanjiv Choudhary,  
Department of Dermatology,  
All India Institute of Medical  
Sciences, Nagpur; Plot No. 2,  
Sec- 20, MIHAN,  
Nagpur - 441 108, Maharashtra,  
India.  
E-mail: sanjiv.derma26@gmail.  
com*

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to determine minimal urticarial dose and entire causative spectrum by Wood's lamp alone, still it can be utilised as an inexpensive, handy and widely available tool to diagnose solar urticaria; especially in resource-poor settings. Further, to detect photosensitivity to UVB radiation in cases of solar urticaria, hand-held narrow band UVB device may be utilized; which again is a cheaper option. We, therefore, suggest the readers to utilize Wood's lamp along with narrow band ultraviolet B lamps to diagnose suspected cases of solar urticaria.

#### ***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 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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