A 34-year-old male patient presented to our outpatient department with complaints of asymptomatic multiple scattered hyperpigmented lesions all over his body. The patient first noticed appearance of these lesions around 1 year back over his chest which over time progressed to involve his abdomen, back, and both the arms. There was no history of erythema preceding these lesions. There was no history of dizziness, headache, episodes of increased sweating, epigastric pain, or diarrhea. No history of hospitalization, anaphylaxis, and drug allergy could be elicited. On cutaneous examination, multiple discrete brownish to hyperpigmented macules of approximately 0.2 × 0.3 cm were seen over chest, abdomen, back, and upper limbs [Figure 1a-c]. Palms, soles, scalp and mucous membrane were spared. Darier’s sign was positive [Figure 1b]. Dermoscopic examination was done (Dermlite II hybrid m; 3Gen, LLC, San Juan Capistran, USA; non-contact polarized mode, ×10 magnification; images captured using Dermlite adapter for Iphone X) which revealed a brownish pigment network arranged in reticular pattern over a reddish background [Figure 2]. Histopathological examination of the macule revealed hyperpigmentation of basal layer with mast cell aggregates in dermis [Figure 3a]. Giemsa stain was done which showed diffuse positivity for mast cells [Figure 3b]. A final diagnosis of urticaria pigmentosa (UP) was made. Complete blood count, liver and kidney function, serum tryptase level, and abdominal ultrasonography of the patient were found to be normal. The patient was started on tablet fexofenadine 120 mg twice a day. Counselling regarding avoidance of triggers of mast cell degranulation was done which includes emotional stress, friction, consumption of alcohol, and certain medications like non-steroidal anti-inflammatory drugs, narcotics, polymyxin, radiological contrast, and ionizing radiation.

Mastocytosis is characterized by proliferation and accumulation of mast cells in various organs like bone marrow, liver,

**Dermoscopy of Urticaria Pigmentosa**

**Figure 1:** (a) Multiple, discrete brownish to hyperpigmented macules scattered over chest, abdomen, and arms; (b) multiple, discrete brownish to hyperpigmented macules scattered over back. Darier’s sign is seen to be positive (black arrow); (c) closer view of the macules

**Figure 2:** (a) Dermoscopy of macule over abdomen reveals brownish pigment network arranged in reticular pattern over a reddish background; (b) macules over back showing Darier’s sign shows reticular brownish pigment network over a more conspicuous reddish background (Dermlite II hybrid m; 3Gen, LLC, San Juan Capistran, USA; non contact polarized mode, ×10 magnification)

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spleen lymph nodes, gastrointestinal tract, and skin, with involvement of skin being the most common.\cite{1} According to the World Health Organization, cutaneous mastocytosis is subclassified into three variants: maculopapular cutaneous mastocytosis (also known as urticarial pigmentosa [UP]), diffuse cutaneous mastocytosis, and solitary mastocytoma of the skin.\cite{2} Confirmation of diagnosis is done by presence of a dermal infiltrate composed of mast cells predominantly. Special stains such as Giemsa and Toluidine blue can be employed for better visualization of mast cells.\cite{1} On dermoscopy, presence of a pigmented network pattern is suggestive of melanocytic lesions, but can also be seen in other disorders like dermatofibroma, solar lentigo, pigmented seborrhic keratoses, accessory nipple, Kaposi sarcoma, and even healthy skin.\cite{2} Lately, authors have suggested adding maculopapular mastocytosis to causes of pigmented network seen in dermoscopy.\cite{1,2} The dermoscopic findings in other variants of cutaneous mastocytosis have been detailed in Table 1. In our case, in addition to the reticular brownish pigment network already described previously,\cite{1-3} we also found an underlying reddish background in all the lesions. Though a similar pigment network is seen in both melanocytic nevi and UP, the underlying reddish background seen in the present case is missing in the former, which can help differentiate between the two. The reticular pigment network can be ascribed to the increased melanogenesis and hyperpigmentation of epidermal basal layer induced by mast cell growth factor which was also seen histopathologically in our case. We believe that the reddish background seen underlying the pigment network could be secondary to the dermal mast cell degranulation which forms the basis of Darier’s sign elicited clinically, and was correlated with histological examination as well in the present case (black arrows in Figure 2b denoting mast cell degranulation). Though findings in the present case reveal that a reticular pigment network over a reddish background is highly suggestive of UP, studies with larger number of patients are needed in this area. Hereby, we present this case to emphasize on the utility of dermoscopic examination in reaching the diagnosis of UP and increase awareness regarding the same.

**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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**Table 1: Dermoscopic findings of variants of cutaneous mastocytosis**

| Disorder            | Dermoscopic findings                                                                 |
|---------------------|--------------------------------------------------------------------------------------|
| Maculopapular UP\cite{1,2} | Light-brownish blot, brown reticular lines, and a pigment network pattern            |
| Mastocytoma\cite{1,4}   | A yellow-orange blot, brown reticulate network on a background of yellowish hue, central white structureless area, red dots, and a marginal reticulate hyperpigmented rim was reported in a case recently |
| Telangiectasia macularis eruptive perstans\cite{1} | Brown reticular lines and thin reticular telangiectasias on a mild erythematos base |
| Present case         | Brownish pigment network arranged in reticular pattern over a reddish background     |

![Figure 3: (a) Epidermis showing mild spongiosis, hyperpigmentation of the basal layer. Dermis showing mast cells aggregates (black arrows) along with lymphocytes and dermal edema. (H and E, 10×). (b) Giemsa stain showing diffuse positivity for mast cells in dermis](image-url)