

## THERAPEUTIC RESPONSE OF URTICARIA PIGMENTOSA TO DOXEPIN

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A 12-year-old boy suffered from urticaria pigmentosa without any systemic involvement. The symptoms improved well with oral doxepin, 10 mg thrice daily for 3 months.

**Key words :** Urticaria pigmentosa, Mastocytosis, Doxepin.

Mast cells accumulate within various organs of the body in the mastocytosis syndrome. The syndrome has been classified into two major groups; the cutaneous form or urticaria pigmentosa, and the systemic form. Cutaneous form may manifest with, (1) a solitary lesion or mastocytoma, or (2) generalised lesions which are of three types : (i) multiple macules, papules or nodules, (ii) telangiectasia macularis eruptiva perstans, and (iii) erythrodermic or diffuse mastocytosis. Systemic mastocytosis may have : (a) various organs infiltrated with or without skin involvement, but mast cells not circulating in the blood stream, or (b) mast cell leukaemia with visceral involvement and mast cells circulating in the blood stream.<sup>1</sup> Sangster<sup>2</sup> was the first to introduce the term urticaria pigmentosa. Relation between urticaria pigmentosa and the mast cells was first recognised by Unna.<sup>3</sup> Another classification of urticaria pigmentosa consists of : (1) Solitary lesions (10%) (2) multiple lesions with onset in infancy or childhood that tends to clear up with adolescence (65%), and (3) multiple lesions that develop in adults.<sup>4</sup>

Four cases have been previously described in the Indian literature.<sup>5-8</sup> One of these was bullous urticaria pigmentosa.<sup>7</sup>

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Double-blind cross over studies<sup>9,10</sup> have shown that an antidepressant agent, doxepin is much more effective in controlling chronic idiopathic urticaria in comparison with conventional antihistaminics. This prompted us to try doxepin in urticaria pigmentosa.

Doxepin is a tertiary amine type of a tricyclic agent which is a potent inhibitor of the presynaptic uptake of nor-epinephrine and serotonin.<sup>11</sup> Doxepin hydrochloride, a mixture of the *cis* and *trans* isomers of 3—(dibenz (b, c) oxepin—11 (6H)—ylidene) — NN — dimethyl-propylamine hydrochloride, C<sub>19</sub> H<sub>21</sub> NO, HCl, is readily absorbed from the gastro-intestinal tract, metabolised in the liver and excreted in the urine, either free or in the conjugated form. Its main side effects are drowsiness, dry mouth, metallic taste, constipation, urinary retention, blurred vision, palpitation and tachycardia. The dose is 30-150 mg daily in divided doses.<sup>12</sup>

### Case Report

A 12-year-old male had innumerable, pruritic, maculo-papular, pigmented lesions all over his body for the last two years. This ailment was not found in his family. Urticarial wheals developed on the lesions on scratching or taking hot bath. There was no flushing, palpitation, diarrhoea, abdominal pain, nausea, vomiting, shock, dizziness, epistaxis and bone or joint pain. The lesions were not exacerbated by taking aspirin or shell-fish. Darier's sign was positive (Fig. 1). There were no associated nodules, plaques, bullae, telangiectasia or