

extensor arms and forearms, upper back, neck and occasionally over forehead and temples. They often give history of application of cosmetics, perfumed or antibacterial soaps, ingestion of carrot, fig, citrus fruits - especially lime. The condition is more often reported by females, probable because of their more concern for complexion. There is wide individual variation in susceptibility and the reaction occurs in only a small proportion of those exposed.

All the substances mentioned contain photoactive chemicals like petrolatum, lanolin, tar derivatives, and perfume in cosmetics; psoralen in bergamot oil in perfumed soaps; salicylanilide and hexachlorophene antibacterial soaps. Pigmentation may follow systemic absorption or topical application of these substances.

Mechanism of pigmentation can be attributed to light-induced cumulative insult dermatitis resulting in slow and silent hyperpigmentation by photoactive chemicals, which because of their low concentration in the substances mentioned, do not readily produce any acute phototoxic reaction.

It closely resembles Riehl's melanosis where pigmentation is confined usually over face. However, horny follicular plugging and scaling, a feature of Riehl's melanosis, is not seen in photodynamic hyperpigmentation.<sup>1</sup>

Pigmentation gradually fades over months when the offending agent is identified and removed.

Hydroquinone and other depigmenting agents like hydrocortisone or retinoic acid do not help much.

Progressive and persistent pigmentation is due to either systemic absorption of the chemicals or when the offending agent can not be identified.

Probably, we are all aware of this clinical condition but there is lack of proper nomenclature of this entity in our literature.

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### ***Transcutaneous electrical nerve stimulation in treatment of post herpetic neuralgia***

#### ***To the Editor***

Various neurological problems may complicate herpes zoster of which post herpetic neuralgia is the most important in terms of chronic morbidity.

The pain of PHN is typically described

as a constant burning discomfort on which may be superimposed intermittent lancinating pain and dysaesthesia.<sup>1</sup> Treatment of PHN has been subject of various reviews.<sup>2,3</sup> TENS is a non-invasive procedure which has been used in chronic pain. It has as its rationale the gate control theory of pain.<sup>4</sup> We attempted this form of therapy in 10 patients of post herpetic neuralgia of either sex. Age of patient varied from 30-45 years: mean duration of PHN was 4 months. None of the patients had received oral acyclovir or systemic steroids as part of their herpes zoster treatment. All of them were prescribed single non-steroidal anti-inflammatory drug (ibuprofen 400 mg + paracetamol 325 mg) for neuralgia before they were taken up for TENS therapy. Informed consent was obtained after the procedure had been fully explained. TENS therapy was given with Ts 8000 P stimulator. Two electrodes were placed on near the most painful area or over the related nerve. Frequency of stimulation was adjusted to 70 Hz and pulse width to 0.2 amplitude was gradually increased to produce the maximum tolerable paraesthesia but not causing muscle contraction or fasciculation. Stimulation was scheduled daily for 20 minutes period for 10 days.

Assessment of pain relief was done

after last day of treatment using a pain rating scale score as follows:

1. Total pain relief, no analgesic required- 75%
2. Occasional slight pain but no analgesic required 51-75%
3. When analgesic required occasionally and in reduced quantity 26-50%
4. Slight reduction in pain 25%

After 10 days of TENS therapy, following results were obtained. Two patients showed pain relief 25%, 2 patients had a score of 25-50 %, 4 patients had a score of 51-75 % and 2 patients a score of 75%.

Thus 6/10 patients (60%) reported 50% or more reduction in pain following TENS therapy, individual data revealed that patients with a shorter duration of neuralgia responded better to TENS.

The exact mechanism of action of TENS is not known. Various studies have shown that electrical stimulation of segmental cutaneous. A beta fibres selectively, inhibits C fibres. 'A' fibre stimulation also activates some descending inhibitory pathways from brainstem.<sup>5</sup> Our results indicate that TENS appears to have a beneficial role in PHN and may be worth a trial in view of lack of adverse effects and inconsistent

results even with other available modes of therapy.

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