PSORIASIS

ASSESSMENT OF URIC ACID LEVELS IN CHRONIC PLAQUE PSORIASIS

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Introduction: Hyperuricaemia has been found to be a common finding in psoriasis alongside metabolic dysregulation. However, studies were inconclusive about the cause of uric acid elevation because locally produced uric acid in skin lesions hasn't been taken into account.

Objective: Evaluate serum and tissue levels of uric acid in patients with chronic plaque psoriasis.

Materials and Methods: Serum and skin biopsies collected for serum and tissue uric acid measurement in 30 psoriatic patients and 30 matched control individuals.

Results: Serum uric acid concentration in patients with psoriasis was not significantly different from that of healthy subjects ($P > 0.05$), while the mean tissue uric acid level was significantly higher in psoriatic patients than control subjects (4.11 mg/mg ptn ± 1.61 vs. 0.75 mg/mg ptn ± 0.35; $P < 0.001$). There was no association with disease duration, PASI score or BMI ($P > 0.05$).

Conclusions: To our knowledge, this is the first clinical study to measure the tissue level of uric acid in the skin of patients with psoriasis. Elevated tissue uric acid in psoriatic plaques could be a manifestation of enhanced purine catabolism state due to the increased epidermal cell turnover of psoriasis. Uric acid could be an important link between psoriasis and its comorbidities especially metabolic syndrome.