

EXANTHEMATOUS SKIN ERUPTION DUE TO NICOTINIC ACID

A case report

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Summary

A case of maculo-papular eruption caused by nicotinic acid is being reported. The causative drug was confirmed by repeated oral provocation.

KEY WORDS: Drug eruption; Nicotinic acid; Provocation test.

Introduction

Allergic reactions due to vitamins are uncommon. Most of these are caused by vitamins of the B complex, out of which vitamin B₁,^{1,2} vitamin B₁₂,^{3,4} and folic acid⁵ are the main agents. Recently, an erythematous maculo-papular eruption caused by vitamin A was observed by us and confirmed by provocation tests⁶. Nicotinic acid commonly produces episodes of burning sensation and intense cutaneous flushing. The other side effects include itching, vomiting, diarrhoea, dyspepsia, dry skin, hyperpigmentation, acanthosis nigricans, peptic ulceration, jaundice, increased plasma transaminase activity, hyperglycemia, increased plasma uric acid, postural hypotension and toxic amblyopia⁷. To the best of our knowledge allergic eruptions due to nicotinic acid have not been reported. We are reporting the case of a maculo-papular eruption due to nicotinic acid confirmed by repeated provocation tests.

Case Report

A 25-year-old housewife was operated for mitral stenosis on March 12, 1981. Since then she started taking proxyvon (acetaminophen 400 mg, diazepam 2 mg and dextro-propoxyphene hydrochloride 65 mg) one tablet off and on for backache along with digoxin 0.25 mg, potassium chloride 3 gm daily and frusemide 40 mg on alternate days. On March 21, 1981 she added fesovit (ferrous sulphate 150 mg, ascorbic acid 50 mg, riboflavin 2 mg, thiamine mononitrate 2 mg, nicotinamide 15 mg, pyridoxine hydrochloride 1 mg and pantothenic acid 2.5 mg) 2 tablets daily. The next day, she noticed severe itching all over the body with multiple erythematous macules and papules on both extremities and back. Fesovit was stopped while the other medicines were continued. On March 23, 1981, vitamin B complex forte (thiamine 5 mg, riboflavin 2.5 mg, pyridoxine 0.75 mg and niacinamide 25 mg) 2 tablets and pheniramine maleate 50 mg daily were added. There was no improvement in the lesions during the next two days. On March 25, 1981, vitamin B complex forte was stopped, the other medicines being

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continued. The lesions cleared in 5 days with topical corticosteroid cream.

Provocation tests were started on April 3, 1981 giving 50 mg of nicotinic acid. One and half hours later, she developed itching all over the body, along with erythematous papules on the forearms and chest. The lesions subsided following 25 mg pheniramine maleate orally. On subsequent days other drugs were tested giving one drug after every 24 hours. There was no reaction following riboflavin 10 mg, pyridoxin 40 mg, calcium pantothenate 50 mg, multivitamin containing thiamine 1 mg, ascorbic acid 15 mg, riboflavin 1 mg, vitamin A 1000 units and vitamin D 100 units (5 tablets) and fefol (folic acid 0.5 mg and ferrous sulphate 150 mg) 1 tablet. On April 13, 1981 patient was again given 50 mg of nicotinic acid which within 3 hours resulted in recurrence of itching all over the body with erythematous papules on the upper back and chest.

Discussion

Repeated occurrence of itching and erythematous papules within 1½ and 3 hours following 50 mg of nicotinic acid confirms the causal association of the eruption with nicotinic acid.

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