

Sodium Salicylate and Aspirin Disease

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Patients with "aspirin disease" are often offered a diet devoid not only of food colorants and food preservatives but also of salicylic acid. In patients reacting with bronchial asthma after aspirin ingestion administration of large amounts of sodium salicylate did not elicit any reaction. It is therefore concluded that a less strict diet without exclusion of salicylate-containing food can be recommended.

Key words: acetylsalicylic acid; aspirin disease; bronchial asthma; sodium salicylate.

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Acetylsalicylic acid (aspirin) and certain other synthetic analgesics can in sensitive persons elicit reactions which clinically cannot be distinguished from reagin-mediated allergic reactions (2). This clinical entity has been named "aspirin disease" (5). Salts of salicylic acid are naturally present in most vegetables and fruits (1) and may be used as a preservative and a flavouring agent in many beverages and canned foods (3).

It has been suggested that reactions might be elicited in patients with aspirin disease, by ingestion of salicylates, and the present study was performed to elucidate this probability.

Twelve patients who were known to develop bronchospasm after ingestion of aspirin were challenged single blind on two occasions 1 day between tests. No drugs were given 8 hours before the challenge. In the first challenge 100 mg, 500 mg, in eight instances 1000 mg and in six instances 2000 mg of sodium salicylate in enterosoluble capsules were given at intervals of 1 hour. The second challenge consisted of 1 mg, 10 mg and 100 mg acetylsalicylic acid in similar enterosoluble capsules given at intervals of 1 hour until a reaction occurred. As a measure for the lung function the *peak*

expiratory flow rate (PEFR) was measured every 30 min until an asthmatic response occurred or for 6 hours after the last test dose. The patients were in the wards during the test period so any later reactions could be observed. An asthmatic response was considered present if a fall in PEFR was more than 20% of the prechallenge value and stethoscopic and clinical signs of bronchospasm developed.

All patients reacted to acetylsalicylic acid; two after 10 mg and 10 after 100 mg. The reaction developed from 30 min to 3 hours after ingestion. None of the patients reacted after ingestion of sodium salicylate.

Intolerance to acetylsalicylic acid is in 8-44% of the cases combined with intolerance to azo dyes or benzoates (4, 6) and "aspirin disease" is therefore regarded as a food intolerance. This has led to attempts of dietary treatments. The dietary schemes have, however, often included the elimination of foods containing salicylate salts, and have therefore been very difficult to follow. As fruits and vegetables at the most contain 60 mg salicylates per kilo (1), the result of the present study suggests that foods need not be eliminated from the diet because of the

salicylate content. Salicylate containing berries may also contain benzoates (1) and in patients with intolerance to benzoates exclusion may be necessary on that account. For the majority of patients with "aspirin disease" a less strict diet can be of practical importance and much easier to follow, by allowing foods containing salicylate in a diet program.

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