

Reye's Syndrome and Salicylate Use

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Abstract

During an outbreak of influenza A, seven patients with Reye's syndrome and 16 ill classmate control subjects were evaluated for characteristics of the patients' prodromal illness and the control subjects illness and for medication usage. Patients during the prodrome and control subjects had similar rates of sore throat, coryza, cough, headache, and gastrointestinal complaints except for documented fever which occurred significantly more often in patients than in control subjects ($P = .05$). While medications which did not contain salicylate were taken as frequently by patients as control subjects, patients took more salicylate-containing medications than did control children ($P < .01$). All seven patients took salicylate whereas only eight of 16 control subjects did so ($P < .05$). Patients took larger doses of salicylate than did the entire control group ($P < .01$). When the eight control subjects who took salicylate were compared with the patients, the patients still tended to take larger doses ($P = .08$). Patients with fever took salicylate more frequently than control subjects with fever ($P < .01$). In addition, salicylate consumption was correlated with severity of Reye's syndrome ($P < .05$). It is postulated that salicylate, operating in a dose-dependent manner, possibly potentiated by fever, represents a primary causative agent of Reye's syndrome.

<http://pediatrics.aappublications.org/content/66/6/859.abstract>