

SENSITIVITY TO SESAME SEED

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A THOROUGH review of the literature reveals no published reports of sensitivity to sesame seed prior to a case described recently by Rubenstein.¹ In this case, attacks were brought on by ingestion of a confection known as Halvah, which contains sesame seed and oil, and also by Italian-French bread containing sesame seed. Outstanding in the allergic reaction were the picture of shock and the symptoms of edema of the glottis. Intense erythema and itching of the skin were also prominent.

Because of the scarcity of recorded cases, I believe it would be of interest to report an additional case of sensitivity to sesame seed.

CASE REPORT

H. Z., a 40-year-old white man, was first seen in March, 1950, complaining of infrequent attacks of angioedema of the lips, tongue, and uvula associated with cough and wheezing. Family history for allergy was negative. Past history revealed no allergic disorders prior to 1940. In 1940, the patient had several attacks of urticaria. These attacks were comparatively mild and abated quickly and spontaneously. Their cause was not determined. Between 1942 and 1946, while the patient was serving with the armed forces, there were no attacks of urticaria.

In March, 1950, the patient was seen with marked angioedema of the lips, tongue, and uvula. There was also a hacking cough; sibilant sounds were present in both lungs. He was given 4 minims of Epinephrin 1:1000 subcutaneously with partial relief in 20 minutes. An additional 4 minims quickly cleared both the angioedema and asthmatic symptoms.

On questioning the patient it was learned that about 30 minutes prior to his being seen, he had eaten a piece of Halvah. Within 10 minutes after ingestion, he began to feel a burning and tingling sensation of the lips and throat. By the time he reached the office ($\frac{1}{2}$ hour after ingestion), the symptoms of angioedema and asthma had fully developed. At this time the patient volunteered the information that he had had several previous attacks after eating Halvah as well as after partaking of a particular home-baked pastry.

A few days after this episode, studies were begun to determine the etiologic factors involved. It had been ascertained that the brand of Halvah eaten by the patient contained crushed sesame, corn syrup, sugar, vegetable oil, egg albumin, cocoa, and chocolate. The pastry that precipitated the attack contained the following ingredients—flour, baking powder, vegetable oil, eggs, honey, sugar, and sesame seed. Intracutaneous tests of various foods, including all ingredients of both Halvah and the pastry in question, were performed with the following results: there were moderate reactions to chocolate, oats, tomato, codfish, coconut, grapefruit, tea, and pineapple; slight reactions were obtained to wheat and cottonseed; negative reactions were shown by egg albumin, peanut, and corn. Serial testing with sesame seed extract, 1 protein nitrogen unit per cubic centimeter and 10 protein nitrogen units per cubic centimeter produced a slight reaction with the former and a moderate reaction with the latter. Thereupon an intracutaneous test with a sesame seed extract 100 protein nitrogen units per cubic centimeter was performed and showed a marked active reaction.

Passive transfer tests were done and showed identical reactions in every case as were obtained by direct testing.

Clinical trial of all positively-reacting foods was now begun. Although the patient's diet had not been restricted, except for sesame seed, during the period required for skin testing, and there had been no attacks of angioedema or asthma, it was nevertheless decided to eliminate all positively-reacting foods for one week and then to re-introduce these foods into the diet one at a time. Each food was given in more than ordinary amounts on 2

successive days and then withheld for 3 days. If no symptoms occurred, the procedure was repeated. If no symptoms then developed, the food was considered nonallergenic and added permanently to the patient's diet. In addition, any food that gave a negative skin test but was an ingredient of either Halvah or the aforementioned pastry was tested clinically in the same manner. In this group were eggs, corn syrup, honey, and the various vegetable oils including corn oil, cottonseed oil, peanut oil, and olive oil. None of these foods precipitated asthma, angioedema, or urticaria on clinical trial.

With the cooperation of the patient, it was decided to verify the apparent clinical sensitivity to sesame seed. A No. 1 pink capsule had been filled with 0.3 Gm. of the seed. This was swallowed by the patient while in the office, and he was asked to wait until it could be observed whether or not any reaction would develop. Within 25 minutes, there was marked tingling and burning of the lips and throat, and slight puffiness of the lips. The reaction was not allowed to proceed further but was brought under control by an injection of 5 minims of Epinephrin 1:1000 subcutaneously. In order to rule out any psychic element, the test was repeated at weekly intervals using poppy seed and caraway seed as controls. In neither case was there a reaction. When the test was repeated with sesame seed, the angioedema again developed. At no time was the patient informed as to what seed was used; nor could he have known what seed was used inasmuch as all capsules were the same in size and color.

With scrupulous avoidance of any food that might contain sesame seed, the patient has remained entirely symptom-free.

COMMENT

A case of angioedema and asthma due to the ingestion of sesame seed is presented. Judging from the scarcity of reports in the literature, such sensitivity is rather uncommon. However, when it does occur, the symptoms may be alarming.

REFERENCE

1. Rubenstein, L.: Sensitivity to Sesame Seed and Sesame Oil, *N. Y. State J. Med.* 50: 343, 1950.