A 38-year-old female referred to Allergy Unit with a history of oral allergy syndrome (OAS), itching of the scalp and palms, generalized urticaria, rhinitis and dyspnea necessitating intervention in the emergency department in few minutes after ingestion of meat with sauce or meatball at the restaurant for ten years. She also reported to experience OAS after ingesting ready soup, chocolate, pastry and cookies. The personal history did not reveal allergic rhinitis, asthma, atopic dermatitis, drug or venom allergy. The repeated SPTs with soy revealed a remarkable wheal which is greater than the positive control. The SPT with aeroallergens including birch was found to be negative. The soy-specific IgE was noticeably positive (82.30 IU/L). The total IgE and serum basal tryptase levels were normal (Table 1). Food challenge test with soy was not carried out due to a convincing anaphylaxis history.

Discussion

Soy allergy usually presents as either pollen-food syndrome or occupational disease characterized with respiratory symptoms such as rhinitis and/or asthma. Twenty patients over the age of 18 with soy-related food allergy was reported in a multi center study. The major birch allergen Bet v 1 specific IgE was found to be positive in 14 of them. In 4 of there maining 6 patients both peanut specific IgE and peanut-related food allergy history were positive while other two patients had a positive peanut-specific IgE.
specific IgE or peanut allergy history [7,8]. Similarly, a recent multi center study aiming to assess IgE sensitization to different food related allergens in adults revealed that IgE sensitization to true food allergens not cross-reacting with pollens is rare and IgE sensitization to foods was positively correlated with the sensitization to birch pollen allergens Bet v1 and Bet v2. The prevalence of IgE sensitization to soy was found to be 2.33% despite the fact that soy is cross-reactive with Bet v1 [1].

To our knowledge two patients presenting soy related allergic symptoms in the absence of birch and/or peanut sensitizations were defined in the literature. The first one is a 29 years old male who experience anaphylactic reaction after an effort on bicycle followed by ingestion of a soy containing Japanese drink. His medical history did not reveal atopy or food allergy. The SPT with food allergens was positive to only soy. Oral challenge with soy in resting condition was negative while food challenge associated with exercise was positive [9]. The other adult patient was a 53-year-old woman developed rhinitis followed by sudden on set of pruritus, swelling of the lips and tongue, dysphonia, shortness of breath, cough, dyspnea, wheezing and simultaneously appearing urticaria required hospitalization while cooking a processed food-sausages made of pork-meet which was learned to contain soy protein. She specified that she had noticed nasal itching and sneezing with inhalation of fumes while cooking beans some years ago. The SPT with commercial aeroallergens was negative. She had positive SPT responses to commercial food extracts of lentil, pea, bean and soy bean. A prick-to-prick test with the culprit processed food was also positive. The specific IgE measurement with CAP Immuno assay revealed positive results to soy, bean and pea [10].

Our case experienced OAS and anaphylaxis upon ingestion of foods containing soy. Different from the cases mentione above, her symptoms were not related to a triggering factor such as exercise nor were developed on the base of a known food allergy other than soy.

Albeit oral provocation test could not be performed, repeatedly recorded positive pricktests, remark ably high serum soy-specific IgE level and the coherence between the history and the laboratory data, absence of allergic symptoms after removal of soy and soy products from diet as well as lacking of a factor explaining the underly ingreson of the serereactions suggested the diagnosis of soy allergy.

The patient was informed to avoid processed foods containing soy that may pose a risk for developing anaphylaxis and carry an epinephrine auto injector whenever she has her meals at a restaurant.

Although soy is not consumed as pure or in the form of soy drink in Turkey, it is a common food-additive used in restaurant sandals oprocessed foods making it a hidden allergen. Its should be kept in mind that soy related food allergy may present as severe anaphylaxis in the absence of an atopic background in adults.

**Competing interests**

The authors declare that they have no competing interests.

**Authors’ contributions**

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References