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OLGU SUNUMU CASE REPORT

An adult-onset egg allergy

Erişkin yaşta başlayan yumurta allerjisi

Mehmet ÜNSEL[1], Ömür ARDENİZ[2], Nihal METE GÖKMEN[2]

[1] **Division of Allergy and Clinical Immunology, Department of Internal Medicine, Faculty of Medicine, Izmir University, Izmir, Turkey**
İzmir Üniversitesi Tıp Fakültesi, İç Hastalıkları Anabilim Dalı, Allerji ve Klinik İmmünoloji Bilim Dalı, İzmir, Türkiye

[2] **Division of Allergy and Clinical Immunology, Department of Internal Medicine, Faculty of Medicine, Ege University, İzmir, Turkey**
Ege Üniversitesi Tıp Fakültesi, İç Hastalıkları Anabilim Dalı, Allerji ve Klinik İmmünoloji Bilim Dalı, İzmir, Türkiye

ABSTRACT

The development of egg allergy in the late adulthood is rare. In most of the cases, symptoms begin in childhood or early adulthood. Adult-onset egg allergy usually develops either as an occupational disease inflicting workers in bakery and confectionery industries or a bird-egg syndrome caused by cross-reactivity in patients suffering from bird feather sensitivity. Herein we present an adult-onset primary egg allergy appeared differently from the previously reported cases based on the absence of occupational exposure and bird as well as aeroallergen sensitization.

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Key words: Egg allergy, food allergy, adult

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ÖZ

Geç erişkin dönemde yumurta allerjisi gelişimi nadirdir. Yumurta allerjisi olguların büyük kısmında çocukluk veya erken erişkin dönemde kendini gösterir. Erişkin yaşta gelişen yumurta allerjisi, genellikle pastacılık veya şekerleme endüstrisi çalışanlarında meslek hastalığı olarak ya da kuş epiteli duyarlılığı olan bireylerde çapraz reaksiyona bağlı olarak kuş-yumurta sendromunun bir parçası olarak ortaya çıkar. Burada daha önce rapor edilmiş olgulardan farklı olarak mesleki maruziyeti, kuş ve aeroallerjen duyarlılığı olmayan geç başlangıçlı primer yumurta allerjili bir olguyu sunduk.

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Anahtar kelimeler: Yumurta allerjisi, gıda allerjisi, yetişkin

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INTRODUCTION

Egg is one of the most common causes of food allergy. Egg allergy mainly affects children. The development of egg allergy in the late adulthood is rare[1]. Adult-onset egg allergy usually presents either as an occupational disease inflicting workers in bakery and confectionery industries manifesting mainly as asthma leading to the development of IgE-mediated food allergy upon egg ingestion or a bird-egg syndrome caused by cross-reactivity in patients suffering from bird feather sensitivity[2-5]. We report here the case of an adult-onset egg allergy presented differently from the cases reported in the literature.

Yazışma Adresi/Address for Correspondence
Yrd. Doç. Dr. Mehmet ÜNSEL
İzmir Üniversitesi Tıp Fakültesi, İç Hastalıkları Anabilim Dalı, Allerji ve Klinik İmmünoloji Bilim Dalı, İzmir, Türkiye
e-posta: unselmehmet@yahoo.com

CASE REPORT

A 50-year-old housewife presented with a history of uvula oedema, itching of the throat and mouth, urticaria and dyspnea necessitating epinephrine, antihistaminic and steroid administration following ingestion of baked egg 12 years ago. These symptoms recurred several times by eating egg-containing foods such as pastry. She had no symptoms after cessation of ingesting egg and egg-containing foods. She did not have allergic symptoms upon egg consumption in childhood. The medical history did not reveal any systemic gastrointestinal disease. She did not report breeding of birds. She has also been suffering from perennial and mild intermittant sneezing, nasal discharge and obstruction, shortness of breath for 10 years. The basal spirometry was normal. A skin prick test was performed with a large panel of commercial food allergen extracts as well as common aeroallergens including pollens, dust mites, molds, animal epithelia (cat, dog, horse, sheep, budgerigar), egg yolk, egg white and whole egg (Allergopharma, Hamburg, Germany). Skin prick test was found to be positive with egg yolk, egg white and whole egg (5, 9 and 9 mm, respectively) and negative and positive control were 0 mm and 5 mm, respectively (Figure 1). The skin prick test with aeroallergens was negative. Serum specific IgE to egg white and yolk was positive at 1.22 kU/L (+2) and 0.44 kU/L (+1) (CAP system Pharmacia, Uppsala, Sweden), respectively. An oral provocation test was not performed due to history of anaphylaxis and confirmation of the egg sensitivity with the help of skin prick test and serum specific IgE analyses.

Figure 1. Values are expressed as means of the longest and the shortest wheal diameters in the presence of erythema (E.white: Egg white, E.whole: Whole egg, E.yolk: Egg yolk, N: Negative control, P: Positive control).

DISCUSSION

We report here an adult-onset egg allergy. The clinical symptoms appeared when she was 38-year-old. She neither bred bird nor had a history of occupational exposure to egg proteins. Her skin prick test with bird and other animal epithelium was negative. There are a few reports notifying egg allergy presenting in the late adulthood. Asero et al. reported the case of a 47-year-old woman who had a 10-year history of oral and throat itching and gastric pain in the absence of systemic reaction after ingestion of various foods containing fresh egg but she could tolerate cooked egg[6]. We previously notified a female who developed egg allergy when she was 53-year-old. She had episodes of eyelid and lip swelling, itching of the throat, ears and eyes, redness and watering of the eyes, hoarseness, shortness of breath, wheezing, and coughing after she ate egg or well-cooked egg-containing products such as cake or pastry. The patient had no history of occupational exposure to egg proteins however she was sensitized with animal epithelia including cat, dog and bird feather[7]. As a difference from case reported by Asero, our two cases defined allergic symptoms upon well-cooked egg-containing foods and the reaction was anaphylaxis. The present case is unique in that she developed adult-onset egg allergy presenting with anaphylaxis and neither had a history of occupational exposure nor had a sensitivity to animal epithelium. She was advised to avoid the ingestion of egg and food products containing egg as well as influenza vaccination and to carry an automatic adrenaline injector.

To our knowledge, taking into account the patient reported here, there are two patients

with adult-onset primary egg allergy. Unreported cases and underdiagnosis might explain the paucity of them in the literature. It should be kept in mind that egg allergy might begin in the late adulthood.

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