

varying sizes,² 70% bilateral, and 17% unilateral. It presents only exceptionally as a solitary nodule.³ More uncommon are the miliary pattern, or cystic or cavitated lesions.

Histological features include actin and desmin expression, positive estrogen and progesterone receptors, and benignity, a low mitotic index, no atypical cells, and no tumor necrosis.³ It is produced by independent multifocal proliferations of smooth muscle which respond to hormonal stimulus, or by hematogenous dissemination of an initial UL.^{3,4} Cytogenetic studies suggest a monoclonal origin. Its course is generally indolent, except when the site, size or number of lesions cause complications.⁵

The therapeutic approach to PBML is conservative or surgical, and primary excision is the intervention of choice, whenever possible.⁴ In our case, the paramediastinal mass was resected after it increased in size, to avoid local complications due to compression of the adjacent mediastinal structures, and to confirm the nature of this large cystic lesion that differed greatly from the other nodules. Resection of these lesions is recommended, in order to avoid complications, such as massive hemoptysis, and to rule out low-grade leiomyosarcoma. Hormone treatment is recommended for inoperable lesions.⁴

To conclude, PBML should be taken into consideration in women of child-bearing age with multiple pulmonary nodules and history of UL.

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Rhinoconjunctivitis and Occupational Asthma in a Furniture Factory Worker*



Rinoconjuntivitis y asma ocupacional en una trabajadora de una fábrica de muebles

To the Editor,

All workers exposed to cereal flours (not only bakers), may develop sensitization and occupational rhinoconjunctivitis and/or asthma in response to cereal flour allergens.^{1,2}

We report the case of a 31-year-old woman, employee in a furniture factory for nine years, with a history of mild allergic rhinoconjunctivitis and asthma due to house dust mites. She reported a 3-year history of work-related rhinoconjunctivitis. Two years before referral to our clinic she began to have dry cough and breathlessness, which she also attributed to her work environment. All these symptoms increased minutes after handling rye flour, a component of the wood glue used for building furniture.

Skin prick tests (SPT) were positive for grass and olive pollens, *Dermatophagoides pteronyssinus*, wheat flour and rye flour. SPT using a specially prepared extract of wheat flour and rye flour (10%,

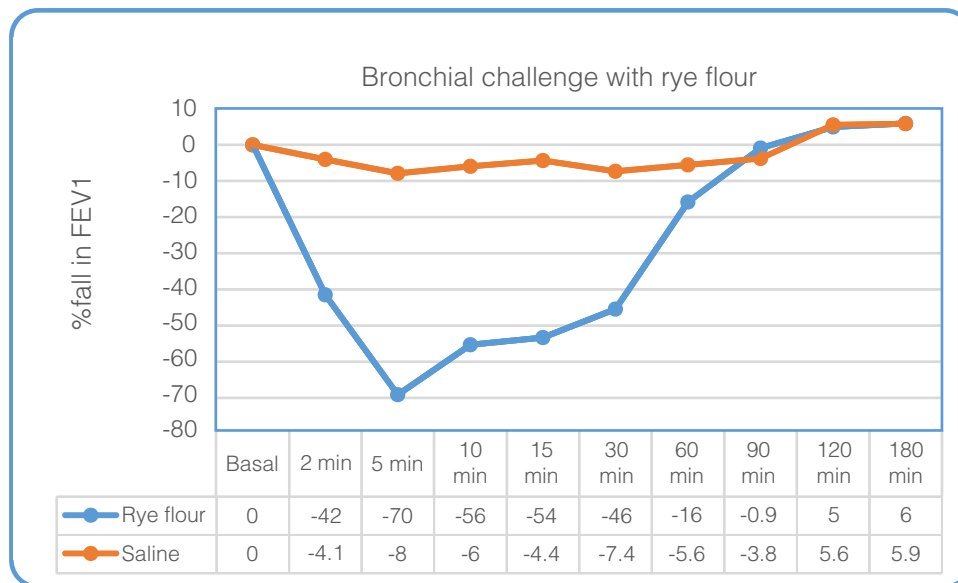


Fig. 1. Bronchial provocation test with rye flour.

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wt/vol) were strongly positive (papules measuring 10 and 12 mm respectively). Specific IgE (ImmunoCAP, ThermoFisher, Uppsala) was 4 kU/L for rye flour, 2.6 kU/L for *D. pteronyssinus*, and 2.1 kU/L for wheat flour.

Spirometry performed when the patient was at work showed FEV1 2.40L (82%) and FEV1/FVC 80%. A methacholine inhalation challenge test also performed in the workplace following an abbreviated protocol³ was positive (0.21 mg cumulative dose).

A specific inhalation challenge test was carried out in the hospital lab by tipping rye flour from one tray to another, increasing the duration of exposure to a maximum of 15 min. Spirometry was performed at baseline, after each exposure and at 2, 5, 10, 15, 20, 30, 45, 60, 90, and 180 min after the challenge with rye flour. Peak expiratory flow was then measured hourly over 24 h (except during sleep). Exposure to rye flour was interrupted after the 2 min challenge because of cough and dyspnea. A 70% fall in FEV1 with respect to baseline values was observed at 5 min (Fig. 1). A control challenge with normal saline was performed 1 day before the inhalation challenge and no significant changes were observed.

Discussion

Our patient's respiratory symptoms were work-related; her disease course, together with the results of diagnostic tests, indicated an occupational allergic respiratory disease triggered by IgE-mediated allergy to inhaled rye flour.

Rye flour allergens should be considered in the diagnosis of occupational asthma in bakers, farmers, and millers.⁴ However, the task performed in the workplace must also be taken into account, because, while some jobs are not generally associated with

occupational exposure to flour, these substances can be used in certain circumstances for specific tasks, as in the reported case.¹

Workers at risk of sensitization are those who are atopic and whose tasks include sieving and mixing ingredients, as occurred in our patient.¹ She also showed very high specific bronchial hyperreactivity, similar to that found by other authors reporting rye flour allergy.⁵

We describe a rare case of occupational rhinoconjunctivitis and asthma caused by rye flour in a furniture factory worker, a job not usually associated with occupational respiratory disease caused by cereal flours.

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