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Letters to the Editor

Workplace-Specific Bronchial Challenge and Occupational Asthma Due To Persulfate Salts☆

Provocación bronquial específica en el trabajo y asma ocupacional por sales de persulfato

To the Editor:

Persulfate salts are the agents most commonly associated with occupational asthma (OA) among hairdressers.[1] Although the first cases were described decades ago, the prevalence, mechanism, value of diagnostic tests and the progress of these patients remain poorly defined. We present the case of a hairdresser with respiratory symptoms associated with exposure to persulfate salts in whom a specific bronchial challenge (use or exposure test) performed in the workplace was useful for confirming the diagnosis of OA.

A 30-year-old woman who began working as hairdresser at the age of 20. Rhinitis and bronchial asthma in childhood, subsequently asymptomatic. She presented with asthma, onset one year previously and poor control despite treatment. She had had several exacerbations while at work, requiring hospital care, for which reason she was referred to the Respiratory Medicine department.

Initial physical examination was normal. Of note on biochemistry was IgE 456 IU/ml. Specific IgE (RAST/CAP method) was positive for *Dermatophagoides farinae*, *Dermatophagoides pteronyssinus*, *Felis domesticus*, *Canis familiaris* and *Olea europea*. Paranasal sinus and chest X-rays showed no pathological findings. Spirometry results were normal with FVC 3250 ml (94%), FEV1 2670 ml (97%) and FEV1/FVC 82, and post-bronchodilator test was negative. A non-specific bronchial challenge test was performed with increasing methacholine concentrations. FEV1 fell by 30% with a 1.56 mg/l dilution, corresponding to a PC20 of 1 mg/ml. Diurnal variability in peak expiratory flow (PEF) over one month was greater than 20%.

Correct treatment compliance adapted to her level of severity was confirmed, but the patient continued to show symptoms at work. She was asked again about the products she used and she indicated that it was the decolorizing agents that triggered the crises. The patient was asked to bring some along to the clinic and they were determined to contain persulfate salts. In view of suspected OA caused by persulfate salts, an "exposure test" was performed, consisting of monitoring lung function in her workplace using a portable spirometer. After baseline spirometry was shown to be normal, the patient began to use the bleaching agent as usual, lightening a client's hair (washing, decolorizing), while carrying out spirometries every 15 min throughout the process. A fall in FEV1 >20% was observed, confirming the suspected diagnosis of OA due to persulfate salts (Fig. 1).

OA is the most common job-related respiratory disease in developed countries.[2] One of the causative agents is persulfate salts, low molecular weight compounds that act as oxidants, accelerating the bleaching of hair with hydrogen peroxide. Hairdressers are the most exposed professional group.[1] The mechanism appears to be

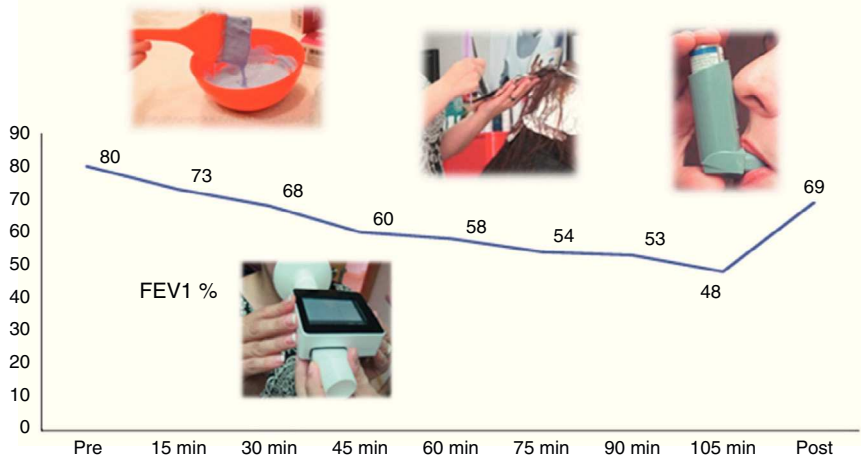

Fig. 1. Specific bronchial challenge in the workplace: monitoring of lung function during work showed a fall in FEV1 >20%. FEV1%: percentage compared to predicted forced expiratory volume in first second; post: post-bronchodilator FEV1; pre: baseline FEV1.

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immunologic, probably IgE-mediated, and there is a latent period between onset of exposure and the appearance of symptoms.[1] With regard to diagnosis, specific bronchial challenge in the laboratory is considered the gold standard. When this is not available, specific bronchial challenge in the workplace is very useful.[2–4] These patients progress well if exposure is avoided.[2,5] However, 70% of them may continue to present symptoms and require treatment, even in the absence of exposure.

References

1. Moscato G, Pignatti P, Yacoub MR, Romano C, Spezia S, Perfetti L. Occupational asthma and occupational rhinitis in hairdressers. Chest. 2005;128:3590–8.
2. Orriols Martínez R, Abu Shams K, Alday Figueroa E, Cruz Carmona MJ, Galdiz Iturri JB, Isidro Montes I, et al. Normativa del asma ocupacional. Arch Bronconeumol. 2006;42:457–74.
3. Muñoz X, Cruz MJ, Orriols R, Torres F, Espuga M, Morell F. Validation of specific inhalation challenge for the diagnosis of occupational asthma due to persulphate salts. Occup Environ Med. 2004;61:861–6.
4. Rioux JP, Malo JL, L'Archevêque J, Rabhi K, Labrecque M. Workplace-specific challenges as a contribution to the diagnosis of occupational asthma. Eur Respir J. 2008;32:997–1003.
5. Muñoz X, Gómez-Ollés S, Cruz MJ, Untoria MD, Orriols R, Morell F. Evolución de la hiperrespuesta bronquial en paciente con asma ocupacional por exposición a sales de persulfato. Arch Bronconeumol. 2008;44:140–5.

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Pulmonary Embolism as a First Manifestation of Intracardiac Extension of an Endometrial Stromal Sarcoma☆

Embolismo pulmonar como primera manifestación de extensión intracardiaca de un sarcoma del estroma endometrial

To the Editor:

We report the case of a 47-year-old patient with iodinated contrast allergy and hypertension, diagnosed 2 years previously with low-grade malignant endometrial stromal sarcoma (ESS) treated with hysterectomy, double adnexectomy and bilateral pelvic lymphadenectomy. One year later she presented left retrosupravesical tumor recurrence that could only be partially resected, and received neoadjuvant radiation therapy and hormone therapy in the form of tamoxifen.

The patient presented with a one-week history of dyspnea on minimal effort. No significant findings were seen on chest X-ray. Significantly, a rapid ELISA test showed D-dimer of 1.141 ng/ml, so lung scintigraphy was performed that confirmed bilateral pulmonary thromboembolism. Furthermore, a large mass in the right atrium that prolapsed into the ventricle during diastole with extension into the inferior vena cava (IVC) was observed on transthoracic echocardiogram (Fig. 1A). Magnetic resonance imaging (MRI) of the chest and abdomen (Fig. 1B) confirmed thrombosis occupying almost the entire lumen of the common iliac veins and the IVC, extending up to the right atrium. Gadolinium uptake was observed on inferior vena cava imaging, supporting the diagnosis of tumor thrombosis.

Surgical intervention was ruled out in view of the partial resection of the pelvic tumor performed one year previously at the time of disease recurrence and because of her concomitant pulmonary thromboembolism. Enoxaparin 60 mg every 12 h and chronic oral anticoagulation were administered. Subsequent clinical progress was favorable, and after 30 months of follow-up the patient remains asymptomatic with an excellent performance status. Resolution of the thrombus in the right atrium and almost complete recovery of IVC patency have been observed on follow-up ultrasound and MRI.

ESS is a rare malignancy that accounts for only 0.2% of cancerous uterine tumors. The 5-year survival rate is 80%–100%. However, 30%–50% of patients present disease recurrence, generally after a long period of latency.[1] Metastases most commonly occur in the vagina, the pelvis and in the peritoneal cavity. IVC tumor thrombosis and intracardiac tumor metastasis are extremely rare.[2,3] Thus, although the prognosis of these tumors is good, they can appear to behave in a more aggressive manner.

Inferior vena cava tumor thrombosis is relatively common in renal carcinoma, and in these cases MRI is usually performed to

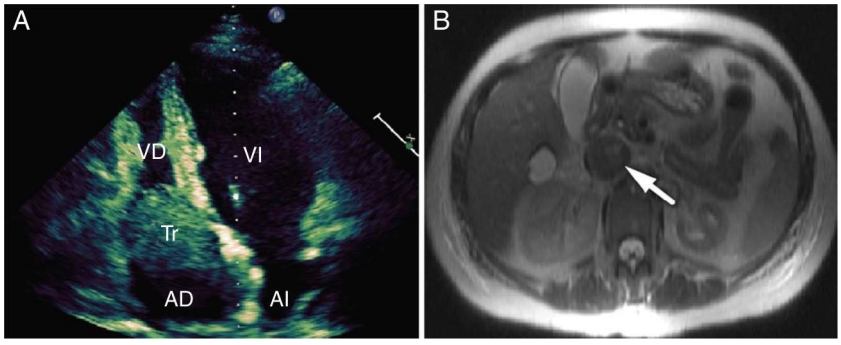

Fig. 1. (A) Transthoracic four-chamber ultrasound, apical view, showing large thrombus in the right atrium shifting toward the right ventricle during diastole. AD, right atrium; AI, left atrium; Tr, thrombus; VD, right ventricle; VI, left ventricle. (B) Abdominal magnetic resonance image of inferior vena cava thrombosis.

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