

Conflict of interests

The authors state that they have no conflict of interests.

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References

1. Idoate MA, Echeveste J. Actualización sobre la biología molecular de los gliomas: hacia una clasificación patomolecular de los gliomas. *Rev Neurol.* 2007;44:217–24.

2. Louis DN, Ohgaki H, Wiestler OD, Cavenee WK, Burger PC, Jouvet A, et al. The 2007 WHO classification of tumours of the central nervous system. *Acta Neuropathol.* 2007;114:97–109.
3. Chao MM, Packer RJ, Myseros JS, Rood BR. Isolated extracranial recurrence of anaplastic ependymoma. *Pediatr Blood Cancer.* 2011;56:317–8.
4. Vinchon M, Leblond P, Nodel R, Dhellemmes P. Intracranial ependymomas in childhood: recurrence, reoperation and outcome. *Child Nerv Syst.* 2005;21:221–6.
5. Antony R, Wong KE, Patel M, Olch AJ, McComb G, Krieger M, et al. A retrospective analysis of recurrent intracranial ependymoma. *Pediatr Blood Cancer.* 2014;61:1195–201.

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Mediastinal Granulomatous Lymphadenitis After Intravesical Bacillus Calmette–Guérin Treatment Mimicking Distant Metastasis of Primary Bladder Carcinoma[☆]



Linfadenitis granulomatosa mediastínica tras tratamiento con bacilo Calmette–Guérin intravesical que simula metástasis distante de carcinoma vesical primario

To the Editor,

A 38-year-old man was admitted to our department with a 1-month history of chest pain and sensitivity that had gradually worsened in the previous few days. Systemic examination and vital signs were normal. His medical record indicated a history of asymptomatic microscopic hematuria diagnosed as bladder carcinoma 3 years previously. He had completed 16 cycles of bacillus Calmette–Guérin (BCG) approximately 16 months earlier. A whole body bone scan was performed to rule out distance metastasis in

the chest wall, but after detecting increased activity at the level of the 5th rib, we decided to perform whole body positron emission tomography/computed tomography (PET/CT) with ¹⁸F-fluoro-2-deoxy-D-glucose (¹⁸F-FDG PET/CT). This revealed increased activity (SUV_{max}: 5.6) in lymph node station 11L, in the left hilar region. Although the preliminary diagnosis had been primary bladder carcinoma metastasis, histological analysis of the samples obtained by endobronchial ultrasound-guided fine needle aspiration (Fig. 1A) revealed granulomatous lymphadenitis (Fig. 1B). The patient therefore received empirical quadruple pharmacological tuberculosis treatment, consisting of isoniazide (300 mg/day), rifampicin (600 mg/day), ethambutol (800 mg/day) and pyrazinamide (1 g/day) for 6 months. Follow-up PET performed 6 months later showed a decrease in FDG uptake (SUV_{max}: 1.1) compared to previous levels. The patient did not report any discomfort at his 1-year check-up.

BCG is an important adjuvant treatment option for reducing the risk of recurrence and progression of bladder carcinoma.¹ Although rare, intravesical BCG treatment can present systemic and localized

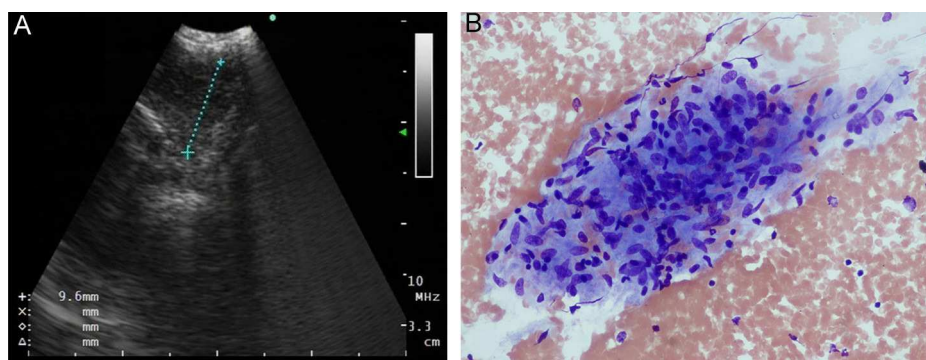


Fig. 1. (A) Endobronchial ultrasound view of the suspicious lesion. (B) Granulomatous formation (hematoxylin–eosin staining $\times 200$).

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complications. Most localized adverse effects are generally self-limiting, and include hematuria, dysuria, cystitis, prostatitis, and orchitis. Systemic adverse effects, however, are less common, and can range from simple febricula to potentially fatal multi-organ failure.²

Several cases of pulmonary or extra-pulmonary granulomatous lymphadenitis secondary to BCG instillation have been described in the English-language literature. However, there is considerable debate on whether the infectious complications secondary to BCG are due to a hypersensitivity reaction or to active infection. Some studies have found viable bacteria in different tissues, such as the lung, pancreas and liver, suggesting active infection.^{3,4} The hypersensitivity hypothesis, meanwhile, is supported by studies in which microorganisms could not be isolated.⁵ This was the case in our patient, as we were unable to demonstrate the presence of acid-fast bacilli in 3 sputum samples and 1 bronchoalveolar lavage sample; culture results were also negative.

In summary, this case is of interest insofar as it illustrates a characteristic complication of intravesical BCG instillation. We hope this report will highlight the importance of bearing in mind the different complications of intravesical BCG treatment, even when there is clinical suspicion of BCG infection.

Conflict of interests

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References

- Hall MC, Chang SS, Dalbagni G, Pruthi RS, Seigne JD, Skinner EC, et al. Guideline for the management of nonmuscle invasive bladder cancer (stages Ta, T1, and Tis): 2007 update. *J Urol*. 2007;178:2314–30.
- Park CH, Jang MA, Ahn YH, Hwang YY, Ki CS, Lee NY. Mycobacterial infection after intravesical bacillus Calmette–Guérin treatment for bladder cancer: a case report. *Korean J Lab Med*. 2011;31:197–200.
- McParland C, Cotton DJ, Gowda KS, Hoepfner VH, Martin WT, Weckworth PF. Miliary *Mycobacterium bovis* induced by intravesical bacille Calmette–Guérin immunotherapy. *Am Rev Respir Dis*. 1992;146:1330–3.
- Soylu A, Ince AT, Polat H, Yasar N, Ciltas A, Ozkara S, et al. Peritoneal tuberculosis and granulomatous hepatitis secondary to treatment of bladder cancer with bacillus Calmette–Guérin. *Ann Clin Microbiol Antimicrob*. 2009;8:12.
- Elkabani M, Greene JN, Vincent AL, VanHook S, Sandin RL. Disseminated *Mycobacterium bovis* after intravesicular bacillus Calmette–Guérin treatments for bladder cancer. *Cancer Control*. 2000;7:476–81.

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Spirometry in Public Hospitals in Navarre. A Comparative Analysis of the 3E Study[☆]



La espirometría en la Neumología pública en Navarra. Análisis contrastado del estudio 3E

To the Editor,

We read with interest the study published in the November issue of your journal by Drs López-Campos, Soriano, and Calle,¹ addressing inter-regional differences in the conduct and interpretation of spirometries in Spain. The methods section states that the data were obtained from a telephone survey of 805 centers selected randomly from among those routinely assessing adult patients with chronic respiratory disease. The survey was completed by the technician responsible for performing spirometries in each center. We are unaware of how applicable the results may be in other regions, but we would like to point out some discrepancies between the survey results and the data available in our own setting. Indeed, there are stark differences between the authors' claims and the results of an assessment of spirometry testing in primary care (PC) in our setting that we published in your journal in 2006.² However, we are even more concerned by their results on spirometry conducted in specialized centers (SC) in 2012 (the year the study was carried out).

In Table 1, we have listed some of the most striking claims made in this article, and compared them with data from all public respiratory medicine departments in Navarre (listed in total, and separately for each of the 3 groups active at that time: Hospital Virgen del Camino, Hospital de Navarra, and Hospital de Estella). It is clear from these data that the results offered in the article of reference do not represent in any way the real situation in our community.

As the criteria for qualifying the bronchodilator test and spirometry quality are not explained in the methods section, we cannot compare them with our own data. In any case, the percentages listed (25% in PC vs 12.5% in SC in the first case and 93.5% vs 37.5% in the second) are surprising to say the least. We cannot be sure that they do not reflect procedures conducted in another type of health system, since the type of centers interviewed (public, private, hospital or clinic) is not specified, nor is the specialty that was evaluated (respiratory medicine, internal medicine, allergology, etc.). However, as the authors describe the situation in SC, we believe it is essential to point out that these figures are a poor reflection of the spirometry activities conducted in the public respiratory medicine departments of our region.

Finally, as the authors themselves admit, although telephone surveys enable researchers to reach a large number of centers, the limitations of this type of approach mean that any conclusions must be viewed with caution.

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