Table 1 Summary of Laboratory Test Results on Diagnosis and 5 Months Posttreatment.

Parameter	Pretreatment	Aftercare	Normal Range
Erythrocyte count (x10^6/mm^3)	1.52	5.5	4.0–5.2
Hemoglobin (g/dL)	6.0	13.0	12–16
Hematocrit (%)	17.4	41.5	36–46
Mean corpuscular volume (fL)	114.5	75.5	80–100
Reticulocytes (%)	3.06	1.12	0.5–1.5
Serum B12 levels (pg/mL)	105	559	200–900
Blood film	Anisocytosis, polychromasia, macrocytosis, dacrocyte, hypersegmented neutrophils	Hypochromia, polychromasia, microcytosis	

the etiology of 1 of this patient's medications could explain these findings, and the histological changes associated with the drug reaction may have masked those more often found in cases of vitamin B12 deficiency.

Recommended treatment is based on the administration of vitamin B12 either orally, intravenously, or intramuscularly; a number of management protocols exist. In a randomized clinical trial comparing oral and parenteral therapy, both groups showed similar reductions in mean corpuscular volume and increases in hematocrit at 4 months.[11]

The present case highlights the causal relationship between vitamin B12 deficiency and generalized skin hyperpigmentation, an association that presents a wide variety of dermatological manifestations. Clinical suspicion plays a fundamental role in the diagnostic process, and is higher in patients at higher risk, including vegetarians, malnourished patients, older people, and patients who have malabsorption syndromes or have undergone gastrectomy or bariatric surgery.

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Census of Centers That Perform Mohs' Micrographic Surgery in Spain and Description of Their Activity: A Feasibility Study for the Mohs' Micrographic Surgery Registry of the Foundation of the Spanish Academy of Dermatology and Venereology☆

Censo de los centros que realizan cirugía de Mohs en España y descripción de su actividad: estudio de factibilidad para el registro de cirugía de Mohs de la FAEDV

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To the Editor:

Since the forties, when Mohs micrographic surgery was first described,[1] the technique has become widely employed in countries such as the United States and Australia.[2–6] Implantation in Spain[7–10] and other European countries came later and has been less uniform. There are several techniques that can be used to perform Mohs micrographic surgery, each requiring different resources and possibly affecting the final outcome. In 2013, the Foundation of the Spanish Academy of Dermatology and Venereology (FAEDV), in association with the Dermatologic Surgery, Laser, and Cutaneous Oncology working group of the AEDV, proposed the launch of a National Mohs Micrographic Surgery Register, the main objectives of which would be to describe the outcomes of Mohs micrographic surgery under conditions of daily practice, to determine the prognostic factors affecting the outcome of Mohs micrographic surgery for skin cancer, and to analyze the possible influence of technical factors on outcomes. Other objectives were to determine whether the indications for the technique were homogeneous in the different centers in terms of tumor and patient characteristics, and the reasons for not using the technique.

A first step towards these objectives was to perform a survey of centers that regularly performed Mohs micrographic surgery and to quantify their activity in order to estimate the viability and statistical power of the register.

We have therefore performed a survey of the centers that perform Mohs micrographic surgery in Spain. Three sources were used: a survey performed in the Surgery Group of the

Table 1 Centers That Performed Mohs Micrographic Surgery in January 2013 and Were Thus Included in the Survey.

Autonomous Community	City	Center
Andalusia		
	Malaga	Hospital Virgen de la Victoria
	Seville	Hospital Virgen del Rocío
	Seville	Hospital Virgen Macarena
Castile and Leon		
	Leon	Hospital General Universitario de León
Castile-La Mancha		
	Guadalajara	Hospital Universitario de Guadalajara
Catalonia		
	Barcelona	Hospital Clínic
	Barcelona	Hospital del Mar
	Barcelona	Hospital de la Santa Creu i Sant Pau
	Barcelona	Hospital Universitario Sagrado Corazón
	Barcelona	Centro Médico Teknon
	Barcelona	Clínica Dexeus Iderma
	Barcelona	Instituto Pablo Umbert. Clínica Corachan
Madrid Community		
	Madrid	Hospital Clínico San Carlos
	Madrid	Hospital de Alcorcón
	Madrid	Hospital de la Princesa
	Madrid	Hospital Gregorio Marañón
	Madrid	Hospital Ramón y Cajal
	Madrid	Hospital Virgen de la Paloma
	Madrid	Hospital La Zarzuela
	Madrid	Hospital Moncloa
	Madrid	Hospital Quirón Madrid
Valencian Community		
	Valencia	Hospital de Manises
	Valencia	Instituto Valenciano de Oncología
Basque Country		
	Barakaldo	Hospital Universitario de Cruces
	San Sebastian	Policlínica Gipuzkoa
Balearic Islands		
	Manacor	Hospital Son Llàtzer
	Palma	Hospital Quirón Palmaplanas
Canary Islands		
	Las Palmas Gran Canaria	Complejo Hospitalario Universitario Insular Materno-Infantil
	Las Palmas Gran Canaria	Consulta Dr. Jiménez Acosta
Navarra		
	Pamplona	Clínica Universidad de Navarra

AEDV during the 2012 meeting, and repeated by e-mail in January 2013; a survey sent to all members of the AEDV via the website and returned by Info AEDV in December 2012 and January 2013; and, finally, a key person in Mohs micrographic surgery was contacted in each autonomous community to perform an external review of participating centers, with the aim of identifying those centers that regularly performed Mohs micrographic surgery but had not replied to the survey and inviting them to participate in the register.

In this way we obtained data from 30 centers. Of these, 23 replied to the survey that described their activity (Table 1).

Overall, these 23 centers performed 160 operations a month, and it was always a dermatologist who performed the Mohs micrographic surgery. In 22 centers (96%), Mohs micrographic surgery was performed using a fresh-tissue technique and in 15 (65%) using a fixed-tissue technique. Interpretation of the histological sections was done by a pathologist in 21 centers (91%), by a dermatologist in 2 (9%), and by both in 2 (9%). With regard to closure of the defect left by the surgery, this was performed by the dermatologist in all the centers, though often with the collaboration of plastic surgeons in 4 of them (17%) and with other specialists in one (4%).

The main finding of this survey was that the availability of Mohs micrographic surgery does not present a homogeneous geographic distribution in our country.

The limitations of our study include the absence of a detailed description of all the centers that perform Mohs micrographic surgery because the centers did not receive or reply to the questionnaires, as can occur in all surveys, or the experts consulted did not identify all the centers. There may also have been bias in the declaration of the activity. Furthermore, the results are not static but may vary over time. Finally, the concept of Mohs micrographic surgery includes various techniques with different degrees of complexity and this variable complexity may not be adequately reflected in our results.

Based on the data from this study, we consider it possible to draw up a register of Mohs micrographic surgery, and the sample size and the statistical power have been established. In addition, we will be able to determine to what degree the results of the register are representative of Mohs micrographic surgery in Spain. The results may also be useful to plan health care and evaluate the geographic distribution of this type of service, and to facilitate appropriate patient referral and dermatologist training.

Appendix A. Supplementary data

Supplementary data associated with this article can be found, in the online version, at doi:10.1016/j.adengl.2015.09.016.

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