

## Spanish Catheter Ablation Registry and Atrial Fibrillation

### To the Editor:

We would like to congratulate García Bolao et al<sup>1</sup> on the publication of the 2006 Spanish Ablation Registry. We feel that the information that this excellent report provides about atrial fibrillation (AF) deserves further discussion.

In 2006, 540 ablation procedures for AF were performed. This corresponds to a total number of patients that probably does not exceed 450. These procedures were carried out in half of the laboratories and no more than 2 procedures were completed in 4 of the laboratories. Bearing in mind this information and other information obtained at meetings and conferences, we believe that it is safe to assume that more than half of the procedures were carried out in 3 or 4 laboratories.

This supposition leads us to a few questions: why are so few AF ablations done in Spain, and why is it that they are not performed in half of the laboratories?

If electrophysiologists are asked these questions, they are likely to respond that they cannot increase the number of procedures if clinicians do not refer more patients to them, or that they lack the resources for the development of such a complex procedure. If you ask clinicians, we justify the low number of referrals based on the fact that the number of patients is not higher, or because we are not convinced about the benefits of the procedure. In the case of AF, we must recognize that there are few referrals. In 1 study carried out at our center,<sup>2</sup> we only recommended AF ablation in the case of one patient out of a total of 524, using the same criteria that we currently employ to recommend the procedure: recurring cases of AF with frequent, symptomatic episodes that do not respond to medication or in those cases in which it is possible to determine that AF is caused by the ventricular dysfunction.

One out of every 3 inpatients and 1 in 4 outpatients treated by clinical cardiologists has AF. This means that if an average of 15 patients a day, which is not uncommon, are seen during 20 work days per month, each cardiologist sees 70 to 90 AF patients per month. With these numbers in mind, the excuse of not seeing enough patients to refer them elsewhere does not seem plausible. However, if we compare the profile of a patient having undergone AF ablation with another patient seen in daily practice, we may come to different conclusions. The average age of patients undergoing AF ablation in

2005 was 51, and women represented 10% of the patients; in the 2006 register,<sup>1</sup> the age was not given and women represented 16% of the patients. AF patients who we see in consulting rooms and hospital wards<sup>2,3</sup> are 20 years older and are equally represented by both genders. Therefore, we may think that patients who meet the referral criteria are just a small percentage of those with AF, and that the number of procedures carried out is limited by actual needs.

It is evident that assessing risks and benefits is a difficult process. Follow-up studies spanning more than 2 years are rarely found in the literature. In the 2005<sup>4</sup> and 2006<sup>1</sup> registries, the success rate is not indicated; we understand the reasons put forward for this decision, but it should be recognized that the omission does not increase our enthusiasm for the procedure.

Although we are aware that the registry is not the best medium for analyzing these questions, we feel that their examination in the proper forums would be of particular interest for managing this condition. In our opinion, if the number of ablations being performed is the correct one, we should consider limiting the practice to just a few laboratories. However, if the number is lower than what it should be according to available evidence, clinicians should have access to the necessary information to promote more referrals and request that the health authorities provide the personnel and resources necessary for performing the procedures.

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## Response

### To the Editor:

We sincerely appreciate the remarks by Vázquez-Ruiz de Castroviejo et al concerning Ablation Registry data provided by the Electrophysiology and Arrhythmias Section on atrial fibrillation ablation, which certainly reflect the scientific community's interest in this condition and its different forms of treatment. One of the concerns expressed is the relatively low number of centers in Spain that treat this substrate (26 out of 48, in 2006). Without dwelling on other considerations that do not enter into the scope of the Registry, 2 specific facts speak for themselves. Firstly,<sup>1</sup> in 2006, only 31 centers had a non-fluoroscopic navigation system, which is absolutely necessary to carry out this procedure. Secondly,<sup>1</sup> only 26 centers used more than 2 full-time electrophysiologists. In spite of the above, this was the fourth most commonly treated substrate and the first among those considered "complicated," ahead of atrial macroreentrant tachycardia or postmyocardial infarction ventricular tachycardia.

The absence of data on the success rate of the procedure leads Vázquez-Ruiz de Castroviejo et al to be skeptical of it. The Registry only collects acute success rate data, that is, data referring to the final electrophysiological objectives of the procedure (such as, for example, success in pulmonary vein electrical isolation). It is well known that these results can be better than long-term clinical success. For this reason, and with the specific goal of not giving rise to unrealistic expectations for atrial fibrillation ablation, different coordinator groups from the Registry decided not to publish these data. To the contrary of what this omission suggests to Vázquez-Ruiz de Castroviejo et al, the acute success rate is similar to that obtained in the ablation of other substrates. In fact, the rate in 2006 was 91% (previously unpublished data).

The Registry does not enable itself to give estimations on the number of ablation candidates in the general population, at least not directly. The figure contributed by Vázquez Ruiz de Castroviejo et al does not seem exceedingly low considering that the field work of their excellent study<sup>2</sup> was carried out almost 5 years ago. Since that date, scientific evidence and the indications for atrial fibrillation ablation have undergone significant developments,<sup>3</sup> making atrial fibrillation ablation become an earlier choice among therapeutic strategies for maintaining sinus rhythm. Undoubtedly, this figure is considerably higher today.

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