One-quarter of high risk patients denied anticoagulation after AF ablation

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One-quarter of high risk patients do not receive anticoagulants after ablation of atrial fibrillation (AF), according to the latest survey of European practice.

The EORP Atrial Fibrillation Ablation Pilot Study, conducted by the European Heart Rhythm Association (EHRA) of the European Society of Cardiology (ESC), reveals that 65% of patients were taking anticoagulants one year after ablation of AF.1 But up to 25% of patients at high risk of stroke (defined as a CHA2DS2-VASc score >1) were not taking any anticoagulant drug. And around half of patients with a low stroke risk (CHA2DS2-VASc score of 0) were still anticoagulated one year after the procedure.

Study author Professor Josep Brugada, Hospital Clinic, University of Barcelona, said: "Our pilot study was in medium to high volume AF ablation centres and we would expect them to be following anticoagulation protocols. But often the follow-up is performed by a GP or general cardiologist at another centre. Good collaboration between the two centres is absolutely mandatory to ensure that patients received recommended treatments."

This was a prospective, observational registry of consecutive patients undergoing a first AF ablation procedure in 10 European countries. It included 1 410 patients from 72 cardiology centres with medium to high expertise (defined as performing >50 AF ablations per year). The current analysis of one-year follow-up data is published in *European Heart Journal*.2 It provides a contemporary picture of European AF ablation success and complication rates, and how centres assess success of the procedure.

The study found that catheter ablation of AF maintained sinus rhythm in 74% of patients overall. Success without antiarrhythmic drugs was achieved in 41% of patients. When post-ablation atrial flutter/tachycardia were excluded, complications occurred in 2.5% of patients and fewer than 1% were considered major. While 90% of patients had symptoms before the ablation, 55% had no symptoms afterwards.

Professor Brugada said: "In this survey of medium to high expertise centres the overall success rate of AF catheter ablation is relatively high and the overall complication rate is relatively low. The study protocol did not require discontinuation of antiarrhythmic therapy after the 3-month blanking period although it is considered good practice when there is no arrhythmia recurrence."

He added: "We found that protocols for antiarrhythmic therapy were followed more strictly in Northern Europe. Physicians did not give the medication unless the patient had a documented arrhythmia recurrence. It could be that in Southern Europe there is a tendency to give antiarrhythmic drugs if patients have symptoms, without requiring specific documentation of an arrhythmia."

Arrhythmia recurrences during the 3-month blanking period were the only predictor of failure 12 months after the procedure. Doctor Elena Arbelo, co author, also from the Hospital Clinic of Barcelona, said: "Patients who had an atrial arrhythmia during the first 3 months were more likely to have an arrhythmia after the blanking period. But an arrhythmia during the blanking period should not prompt an early re-ablation because 63% of these patients did not have a later arrhythmia. We should still wait for 3 months to assess the real result of the ablation."

Success of the procedure was consistent across European regions. Both success and complication rates were not influenced by the number of AF ablations the centres performed each year. Professor Brugada said: "These results were not surprising because all centres in the study had medium to high expertise and 50 procedures per year is probably above the cut-off point for quality.

We are currently conducting the long term registry which includes all centres and we may find different results in the low volume centres."

The one year follow up was performed in-person for 58% of patients while 42% were followed up by telephone. In-person follow-up was more frequent in Southern and Eastern Europe. Dr Arbelo said: "The high level of telephone contact suggests that 1 centre performed the ablation and another conducted the follow up. It shows how different real life is from clinical studies which require intense follow up monitoring with devices to document arrhythmia recurrences and symptoms."

Professor Brugada concluded: "We found a consistently high success rate and few complications in medium to high volume centres across Europe. But inconsistent use of anticoagulants and antiarrhythmic drugs at one year shows that follow-up needs to be improved. Close cooperation between centres performing ablations and physicians doing the follow-up is essential to ensure that all patients in Europe receive appropriate treatment after the procedure."

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