

Anticoagulation in atrial fibrillation: a changing concept

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Prevention of thromboembolism is one of the main challenges of atrial fibrillation (AF) treatment. Oral anticoagulants significantly reduce this risk¹, but the threshold above which treatment is required remains unclear. Anticoagulant treatment available to date, dicoumarinic drugs, represent a major burden for patients since they interfere with many other drugs and food, require periodic monitoring with laboratory tests, and increase the risk of haemorrhage, a major complication which can be severe or disabling, especially cerebral haemorrhage. This is now a matter of considerable research to find a drug with the same anticoagulant action but without the drawbacks of dicoumarinic agents, and in this respect dabigatran seems to have a promising future².

Not all patients with AF have the same risk for developing arterial embolism. Different scales have been published to evaluate the risk of an embolic event in high-risk patients who would benefit from anticoagulation treatment, and to identify low-risk patients who could be spared the complications of such treatment. The most widely used scales differ little between them³⁻⁵ and clearly identify high-risk patients, namely those with a history of stroke or transient vascular accident, or two moderate risk factors (aged over 75 years, congestive heart failure, moderate-severe left ventricular dysfunction, hypertension or diabetes). It is also clear that patients without any of these factors have a low probability of developing embolic complications and should not receive anticoagulation treatment. But there is a clear gap in the recommendations for patients at intermediate risk (with one moderate risk factor).

The lack of consensus on the treatment of these patients is reflected in clinical practice guidelines. In recent publications on the treatment of AF

by the American College of Cardiology, the American Heart Association and the European Society of Cardiology (August 2006)³, the indication for dicoumarinic treatment shows changes from the previous edition (October 2001)⁶, since the risk factors previously considered as moderate are currently considered high-risk. However, this change in the guidelines, which substantially increases the group of patients with intermediate risk, is based more on concern about the complications of anticoagulant therapy than on evidence from new studies. This lack of consistency is reflected in the study of Azua Jimenez et al presented in this issue of *Emergencias*⁷. In a population of 789 patients treated in an observation area of the emergency department, the authors analyzed antithrombotic prophylaxis and found that the need for anticoagulation changed for almost 30% of patients depending on whether they were classified using the 2001 or 2006 guidelines. The authors are right when they complain that the new guidelines, which theoretically combine theoretical knowledge acquired in the various studies and the experience of the experts, only succeed in placing the ball in another court, requiring greater responsibility on the part of physicians in their daily practice, who must choose either option at their discretion, according to the possibilities of compliance, the patient's wishes, the risk of bleeding or the potential and unconfirmed utility of antithrombotic treatment. Furthermore, new guidelines do not answer the questions logically arising from the change: What should we do with patients previously indicated for and receiving anticoagulation who now may only be indicated for antiaggregation? Can we withdraw the treatment and the burden it implies without subjecting them to the risk of serious complications of their disease?

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Two important studies published recently are contradictory in their attempt to clarify this aspect. Singer et al.⁸ postulate no benefit for anticoagulation therapy in patients at intermediate risk in a population of 13,559 patients followed for an average of 6 years, comparing a dicoumarinic treatment group with a heterogeneous group consisting of untreated patients and others treated with different antiaggregants. In contrast, Healey et al. in a study involving over 6,706 patients followed for an average of 1.28 years showed significant though small benefit for intermediate-risk patients receiving anticoagulation compared to those receiving double antiaggregation⁹. This was especially evident in patients who had already received dicoumarinics, with fewer hemorrhagic complications, compared to those initiating this treatment, probably because the former handled the drug better. An important limitation should be mentioned: the two reports are posterior analyses of previous studies not designed for this purpose.

Clearly, prospective randomized studies with long-term follow up are required, with subgroups for each of the moderate risk factors, but for the moment it seems prudent not to withdraw anticoagulants from patients already receiving them. The issue is open to debate.

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