Towards better management of chronic atrial fibrillation

Important lessons should be drawn from two recently published randomised clinical trials comparing rhythm control and rate control strategies directed at the management of chronic atrial fibrillation in representative patient populations. In the larger Atrial Fibrillation Follow-up Investigation of Rhythm Management (AFFIRM) trial,[1] 4060 patients were followed up for an average of 3.5 years, the rhythm control group did not fare better than those assigned to rate control. Respective rates for death, the composite end-point (death, disabling stroke, anoxic encephalopathy, major bleed, or cardiac arrest), and numbers hospitalised were 18% versus 15%, 22% versus 21%, and 68% versus 60%; the latter difference being statistically significant (P<0.001). Similarly, in the European trial[2] with only 522 patients followed up for an average of 2.3 years, the composite end-point (cardiovascular death, heart failure, thromboembolism, bleeding, pacemaker implantation, or severe drug adverse effect) ensued in 23% and 17% of the patients assigned to the corresponding groups. Moreover, in both trials most patients who had thromboembolic complications, anticoagulation therapy had ceased or was 'sub-therapeutic'. In summary, these trials provide compelling evidence pointing to the clinical and financial burdens imposed by current rhythm control interventions. Thus, if symptoms are not an issue in the course of rate control, the primary focus of management should be redirected to better implementation of long-term anticoagulation, the only strategy of proven benefit.

It is therefore opportune, that this issue of the *Hong Kong Medical Journal* contains a report by Leung and Tam[3] addressing this very point in a local context. The article describes findings from a retrospective audit of antithrombotic therapy for patients with a primary or secondary diagnosis of chronic atrial fibrillation, who were attending a non-teaching regional hospital. In the hospital concerned, long-term antithrombotic therapy (the prescribing of aspirin or warfarin as well as any necessary international normalised ratio [INR] monitoring) was undertaken by individual physicians and not in a dedicated anticoagulation clinic. The authors acknowledge the limitations of their audit (insufficient patient numbers, methodological assumptions, incomplete patient follow-up, and retrospective retrieval of data from computerised records). Their results are nevertheless highly pertinent to practitioners in Hong Kong. Thus, an 'appropriate' choice of antithrombotic therapy (in accordance with American College of Chest Physicians Guidelines) was made for 143 (69%) of the 207 patients whose records were audited. Among the latter, 64 (34%), 93 (45%), and 50 (24%) patients, respectively, were receiving warfarin, aspirin, or neither. Despite approximately 18% of the patients only receiving aspirin although they qualified for warfarin, and a further 13% receiving no antithrombotic therapy although they were eligible, these figures appear at least as encouraging as those reported by groups in North America and Europe.[4,5] At the same time, there was no obvious excess in the rate of untoward haemorrhagic events, which is contrary to the widely held opinion that Chinese people are more prone to bleeding than other races. Leung and Tam[3] suggested that a higher rate of bleeding was not encountered because the estimated mean/median INR in their warfarin-treated patients was approximately 2.0, whereas western guidelines advocate target values ranging between 2.0 and 3.0. It follows that, just as for recurrent venous thromboembolism,[6] there is a need to confirm the effectiveness of long-term low-intensity warfarin therapy for chronic atrial fibrillation, particularly among Chinese patients.

The findings of the audit by Leung and Tam[3] have obvious implications for the local community. Namely, that even outside the context of teaching hospitals, it is feasible to offer appropriate antithrombotic therapy to the vast majority of eligible Hong Kong patients with chronic atrial fibrillation.

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