Aspirin still overprescribed for stroke prevention in atrial fibrillation

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Aspirin is still overprescribed for stroke prevention in atrial fibrillation (AF) despite the potential for dangerous side effects, according to research published today.

Professor Gregory Y.H. Lip, lead author of the European Society of Cardiology (ESC) study, said: "The perception that aspirin is a safe and effective drug for preventing strokes in AF needs to be dispelled. If anything, you could say that giving aspirin to patients with AF is harmful because it is minimally or not effective at stroke prevention, yet the risk of major bleeding or intracranial haemorrhage is not significantly different to well-managed oral anticoagulation."

He added: "All the contemporary guidelines[1] say that aspirin should not be used for the prevention of stroke in patients with AF. And yet our study shows that aspirin is still overprescribed in these patients."

Stroke prevention is central to the management of patients with AF. As the most common cardiac rhythm disorder, AF occurs in 1.5-2% of the general population in the developed world and people over the age of 40 have a 1 in 4 lifetime risk of developing AF.[2] Patients with AF have a five-fold risk of stroke, and when they do have strokes they lead to more death and disability.[3]

Prevention of strokes in patients with AF is based on identification of risk factors.[2] Patients with no stroke risk factors (ie. CHA2DS2-VASc score of 0 in males or 1 in females) are considered 'low risk' and do not need any antithrombotic drugs. Patients with one or more risk factors should be offered effective stroke prevention, and thus be given an oral anticoagulant (warfarin or one of the novel oral anticoagulants). The use of aspirin, either alone or in combination with an oral anticoagulant, is not recommended.

The study published online today in the *American Journal of Medicine* provides the most up-to-date picture of European cardiologists' prescribing of antithrombotic treatment, which includes oral anticoagulation therapy (warfarin and the novel oral anticoagulants) and antiplatelet drugs (mainly aspirin).[4] The data are from the EORP Atrial Fibrillation General Pilot Registry of more than 3 100 patients in nine countries.

Overall the study found that the use of oral anticoagulants has improved over the last decade since the last Euro Heart Survey was performed. Where oral anticoagulation was used, most patients (72%) were prescribed warfarin and just 8% were prescribed a new oral anticoagulant.

Professor Lip said: "Novel oral anticoagulant uptake is still a bit low, probably because of differences in regulatory approval, costs and access to drugs in different countries. But the main point is that overall oral anticoagulant uptake as a whole has improved in the last 10 years."

Aspirin was commonly prescribed, either alone or in combination with an oral anticoagulant, when patients had myocardial infarction or coronary artery disease. The strongest reason to prescribe both drugs was coronary artery disease, which increased the use of combined therapy by more than eight-fold.

Professor Lip said: "Aspirin is still overused for stroke prevention in AF. ESC guidelines say concomitant aspirin should not be given to anticoagulated AF patients with stable vascular disease. The combination of drugs does not reduce cardiovascular events and stroke but does increase the risk of bleeding."

Another worrying finding was that oral anticoagulants were underprescribed in elderly patients, with aspirin alone more commonly prescribed. Professor Lip said: "Elderly patients are at the highest risk for stroke and yet they are given

aspirin which is not recommended and potentially harmful. There is a perception that elderly patients do not do well on anticoagulation. But a number of studies now, including BAFTA,[5] have shown that in elderly patients warfarin is far superior to aspirin in preventing stroke."

Patients with paroxysmal AF were less likely to receive oral anticoagulation compared to patients with permanent AF. Professor Lip said: "Cardiologists are continuing to underprescribe anticoagulation in paroxysmal AF and the belief that these patients are at less risk is another myth. ESC guidelines say that AF patients with stroke risk factors should receive oral anticoagulation irrespective of the type of AF."

Professor Lip concluded: "Our study of antithrombotic prescribing by cardiologists reveals a positive trend of increasing oral anticoagulant use. But worrying misconceptions and practices remain regarding aspirin, treatment of the elderly and paroxysmal AF."

More information: 1. Guidelines which advocate oral anticoagulation therapy for stroke prevention in AF and do not recommend aspirin have been published by the ESC, the Asia Pacific Heart Rhythm Society and most recently the UK National Institute for Health and Care Excellence (NICE) (draft version – see guidance.nice.org.uk/CG/Wave0/ … /Consultation/Latest).

2. 2012 focused update of the ESC Guidelines for the management of atrial fibrillation. Eur Heart J. 2012;33:2719.

3. Guidelines for the management of atrial fibrillation. Eur Heart J. 2010;31:2369.

4. Lip GYH, Laroche C, Dan GA, Santini M, Kalarus Z, Rasmussen LH, Popescu MI, Tica O, Boriani G, Cimaglia P, Hellum CF, Mortensen B, Maggioni AP. Antithrombotic treatment in 'real-world' patients with atrial fibrillation: A report from the Euro Observational Research Programme Pilot survey on Atrial Fibrillation. American Journal of Medicine. www.sciencedirect.com/science/ … ii/S0002934314000692

5. Mant J, Hobbs FD, Fletcher K, Roalfe A, Fitzmaurice D, Lip GY, Murray E; BAFTA investigators; Midland Research Practices Network (MidReC). Warfarin versus aspirin for stroke prevention in an elderly community population with atrial fibrillation (the Birmingham Atrial Fibrillation Treatment of the Aged Study, BAFTA): a randomised controlled trial. Lancet. 2007;370(9586):493-503.

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