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CLINICAL UP-DATE

Antithrombotic treatment in elderly patients with atrial fibrillation☆

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Abstract Atrial fibrillation (AF) in the elderly is a complex condition due to the high number of frequently associated comorbidities, such as cardiovascular and kidney disease, cognitive disorders, falls and polypharmacy.

Except when contraindicated, anticoagulation is necessary for preventing thromboembolic events in this population. Both vitamin K antagonists and direct oral anticoagulants (dabigatran, rivaroxaban and apixaban) are indicated in this context. Renal function should be closely monitored for this age group when these drugs are used.

In recent years, various clinical practice guidelines have been published on patients with AF. The majority of these guidelines make specific recommendations on the clinical characteristics and treatment of elderly patients. In this update, we review the specific comments on the recommendations concerning antithrombotic treatment in elderly patients with nonvalvular AF.

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PALABRAS CLAVE
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Tratamiento antitrombótico en el paciente anciano con fibrilación auricular

Resumen La fibrilación auricular (FA) en el anciano es una entidad compleja debido al elevado número de comorbilidades frecuentemente asociadas, como las enfermedades cardiovasculares y la enfermedad renal, los trastornos cognitivos, las caídas o la polimedicación.

Excepto cuanto esté contraindicada, la anticoagulación es necesaria para la prevención de los eventos tromboembólicos en esta población. Tanto los antagonistas de la vitamina K como los anticoagulantes orales de acción directa (dabigatran, rivaroxaban y apixaban) están indicados en este contexto. En este grupo de edad la función renal debe ser estrechamente vigilada cuando se utilizan estos últimos.

En los últimos años se han publicado diferentes guías de práctica clínica sobre el paciente con FA. La mayoría de estas guías realizan recomendaciones específicas sobre las características clínicas y el tratamiento en los pacientes ancianos. En esta actualización se revisan los comentarios específicos sobre las recomendaciones referentes al tratamiento antitrombótico en los pacientes ancianos con FA no valvular.

Case report

An 83-year-old man, with arterial hypertension and diabetes, experienced a hip fracture 2 months ago due to an accidental fall, which was treated with a total hip prosthesis. The patient was treated with 50 mg/day of losartan, 5 mg/day of amlodipine and 850 mg/day of metformin.

During a routine examination, the attending physician detected atrial fibrillation of uncertain origin. The patient was asymptomatic from a cardiology standpoint. The physical examination was anodyne, although arrhythmia was detected in the auscultation.

Due to the recent fall, the decision was made to anticoagulate the patient with acetylsalicylic acid (100 mg/day). Three months later, the patient was admitted to the hospital with a stroke.

The clinical problem

Epidemiological aspects

Atrial fibrillation (AF) is the most common type of arrhythmia in clinical practice.[1] The Anticoagulation and Risk Factors in Atrial Fibrillation (ATRIA) study, conducted in the United States, observed that AF affects approximately 1% of the general population, although this percentage increases with age from 0.1% in participants younger than 55 years to 9% in those participants aged 80 years or more.[2] The same trend has been observed in Europe; it has been estimated that the prevalence of AF is less than 1% in participants aged 55–59 years and approximately 18% in those who are at least 85 years of age.[3] The VAL-FAAP study analyzed approximately 120,000 participants treated in primary care in Spain. The prevalence of AF was 6.1%, a figure that increased with age from somewhat less than 1% in participants younger than 50 years to 17.6% for those 80 years or older.[4] In the Observation of Atrial Fibrillation and Coronary Disease in Spain (*Observación de Fibrilación Auricular y Enfermedad Coronaria en España*, OFRECE) study that analyzed participants 40 years of age and older treated in primary care, the prevalence of AF was 4.4% and progressively increased starting at 60 years of age, reaching 17.7% in those older than 80 years.[5] In the DARIOS study that analyzed 6 population-based studies, the prevalence of AF was 1.5%, a figure that increased with the age, up to 6.3% in those older than 75 years.[6] Data from the ESFINGE study show that a third of patients older than 70 years hospitalized in the national departments of internal medicine have AF.[7]

The prevalence of AF not only increases with age but also with the presence of other associated comorbidities, such as ischemic heart disease and heart failure, conditions that are also more prevalent in advanced ages.[8,9] Due to the progressive aging of the population, both the prevalence and incidence of AF has increased markedly in recent years.[1,10]

AF increases the risk of stroke by up to 5-fold. More than 15% of stroke episodes are due to AF (36% in individuals older than 80 years).[9] Additionally, stroke associated with AF, when compared with stroke unrelated to AF, has higher morbidity and mortality and causes more sequela and hospitalizations, especially in the elderly.[11–14]

In the elderly population, the treatment objectives for patients with AF should be focused on preventing complications related to the presence of this arrhythmia, especially stroke, as well as on improving quality of life.[12] In this context, anticoagulation plays a fundamental role. However, it is particularly important with the elderly population to balance the risk of both stroke and bleeding, given that both are increased in these patients.[12]

The objective of this update was to review the specific comments by the clinical practice guidelines on antithrombotic treatment in elderly patients with nonvalvular AF (NVAF). It is important to emphasize that the definition of the elderly patient has changed over time. Although in the past elderly patients were considered those aged 65 years or older, the various current clinical practice guidelines and the studies performed with direct oral anticoagulants have raised this cutoff to 75 years.