Gender differences in use of antithrombotic therapy in atrial fibrillation: real-world perspective from the Global Anticoagulant Registry in the FIELD (GARFIELD)

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PURPOSE

• Some epidemiological studies have shown that women are at higher risk of stroke than men,1,2 but women have been under-represented in clinical trials of antithrombotic agents.
• Using data from a large population of patients with atrial fibrillation (AF), which increases the risk of systemic embolism,3 we investigated the rates of effective stroke prevention with vitamin K antagonist (VKA) therapy among women and men, according to CHADS2 score,4CHA2DS2-VASc score,4 and HAS-BLED score.5

METHODS

• The GARFIELD Registry is an ongoing, observational, multicentre, international study of adult patients newly diagnosed with AF and at risk of stroke.
• Consecutive patients were enrolled into cohort 1 (of 5) between December 2009 and October 2011 at 543 randomly selected sites in 19 countries in Asia-Pacific (n=2931, 27.8%), Australia, China, Korea, Japan (n=228, 2.2%), Europe (n=6535, 62.0%), Australia, Denmark, Finland, Italy, Netherlands, Norway, Poland, Spain, Sweden, UK, and Central/South America (n=863, 8.0%, Brazil, Mexico). Investigator sites are representative of the distribution of AF care settings in each country.
• Prospective enrolled patients were ≥18 years old, newly diagnosed (≥6 weeks previously) with non-valvular AF, with ≥1 additional investigator-determined stroke risk factor, not limited to risk factors included in existing risk scores. For patients with established AF diagnosed during the past 6–24 months before enrolment, and ≥1 additional stroke risk factor, baseline data were collected retrospectively from the time of their diagnosis. Data for prospective and retrospective patients were combined in this analysis, with similar numbers of patients in each group.
• Data collected at baseline included patient demographics, medical history, nature of AF, and antithrombotic treatments at diagnosis.
• We analysed use of antithrombotic therapies according to CHADS2 score,1CHA2DS2-VASc score,4HAS-BLED score,5,6 and gender in cohort 1. All components of the CHADS2,CHA2DS2-VASc, and HAS-BLED risk scores are captured in the GARFIELD database, allowing for objective retrospective risk stratification.

RESULTS

• Baseline characteristics for 15,337 patients enrolled in cohort 1 are given in the Table. In this population, 48.2% of patients were women.
• A greater percentage of women compared with men were at moderate to high risk of stroke (CHADS2 score ≥2, Figure 1).
• Most women (95.8%) had a CHADS2 score of 0, and 4.2% had a score of 1 (i.e. female sex as the only risk factor). Among men, 70.5% had a score of ≥2, 23.5% a score of 1, and 6.0% a score of 0.
• Of 6327 patients in whom HAS-BLED score could be calculated, most had a score of 0-2 (75.3% of men; 72.5% of women).
• Rates of use of VKAs and antiplatelets (APs) among men and women with a CHADS2 score of 0 were similar (Figure 2).
• Among patients with a CHADS2 score of 1, men were more likely than women to receive VKA+AP, and less likely to receive AP only (Figure 2).
• Among patients with a CHADS2 score ≥2, men were more likely than women to receive VKA+AP (Figure 2).
• Among those with a CHA2DS2-VASc score of 1 or ≥2, men were more likely than women to receive VKA therapy (with or without AP) (Figure 3).
• Men with a HAS-BLED score of 0–2 were more likely than women to receive VKA+AP, but this was no longer significant for those with a score ≥3 (Figure 4).
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