Editöre Mektup

Epidemiology of atrial fibrillation in Turkey: preliminary results of the multicenter AFTER study

Dear Editor,

We congratulate the authors of the paper titled "Epidemiology of atrial fibrillation in Turkey: preliminary results of the multicenter AFTER study", which evaluated 2242 consecutive patients with at least one atrial fibrillation (AF) in 17 different tertiary health care centers.^[1]

However, we have a few concerns about the study:

1. The efficacy and safety of warfarin anticoagulation in patients with AF are dependent on the intensity of anticoagulation measured as the international normalized ratio (INR). The risk of ischemic stroke increases with INR levels <1.8, and the risk of intracranial hemorrhage increases at INR levels >3.5.^[2] These findings support the standard "therapeutic" INR range for AF of 2.0-3.0. A commonly used summary of the quality of warfarin anticoagulation is the linearly interpolated percent time in the therapeutic range (TTR). TTR must be >65% for a better anticoagulation.^[3] According to the report from the AC-TIVE W trial, if the TTR was below 65%, the benefit of warfarin therapy over aspirin was lost.^[4] Three different methods were identified for the measurement of TTR:

a) Percent of Visits in Range (Traditional Method)

If the patient has had 10 visits, and had readings within the therapeutic range in 6 of them, then the patient is considered in range 60% of the time.

b) Percent of Visits in Range on Given Date (Cross-Section Method)

This method takes a specific date in time, and all patients are evaluated on the last reading prior to that date to see if they were within range. The number of patients in range (on their last reading) is taken as a percentage of the total active patients on that date.

c) Percent of Days in Range (Rosendaal Method)

Letter to the Editor

This is the most complex of the calculations, as it looks at the amount of time between visits to determine how long the patient might have been within their therapeutic range.

In the current study, Ertas and colleagues reported 41.3% of patients on oral anticoagulant therapy had an effective INR level. In other words, nearly 60% of the patients had supra-therapeutic INR levels. However, rather than a single INR, TTR values must be used in epidemiologic studies. Adding TTR values could be valuable for understanding the true levels of anticoagulation.

2. Current guidelines recommend the use of CHA_2 DS_2 -VASc and HAS-BLED scores to predict thromboembolic events and bleeding in patients with AF.^[3] It would be very informative if the authors could provide the data about CHA_2DS_2 -VASc and HAS-BLED scores.

3. The AFTER study showed the lack of anticoagulation therapy in our country just like a previous study,^[5] despite it being medically indicated. We think that the use of novel anticoagulants is better than warfarin in patients with TTR <65% after 3 months in the presence of compliance or in populations not receiving regular INR monitoring due to socioeconomic constraints. However, why none of the patients in the current study was taking dabigatran or rivaroxaban, which are novel anticoagulants that have been available in Turkey for more than two years, is unclear.

4. The authors emphasize in the AFTER study that half of the patients were not receiving oral anticoagulants. However, oral anticoagulants are not indicated in all patients with AF. For example, patients aged <65 years with no other risk factors (i.e. a CHA_2DS_2 -VASc score of 1) may consider aspirin rather than oral anticoagulant therapy. The authors should clarify how many patients are not taking warfarin despite it being clearly indicated and how many patients are taking warfarin with inappropriate indications.

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Authors reply

Dear Editor,

I want to clarify and respond to the comments about our manuscript entitled "Epidemiology of atrial fibrillation in Turkey: preliminary results of the multicenter AFTER study" published in the March 2013 issue of the Archives of the Turkish Society of Cardiology.^[1]

We thank our colleagues for their interest in our research.

1. They recommended using TTR values rather than using a single INR in order to evaluate the efficacy of anticoagulant therapy. It is true and ideal. However, application of percent of visits in range or percent of days in range would not be practical in such a wide study. Therefore, a cross-sectional method was used as the authors stated.^[2]

2. A large amount of data was gathered with this epidemiologic study, and it is impossible and not logical to interpret all the data in one manuscript. CHA_2DS_2 -VASc and HAS-BLED scores were evaluated and will be published as separate sub-studies.^[3]

3. Their assumption regarding the availability of novel anticoagulants for more than two years in Turkey is not true. Dabigatran was the first novel anticoagulant drug and was introduced to the market in March 2011, but was not widely available at the time of the study. Indications and treatment attitudes will be discussed again in depth in another paper.

Sincerely,

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