Anticoagulants vs Antiplatelet Drugs in the Prevention of Stroke after Embolic Stroke of Undetermined Source

Shayesteh Gheibi[1*], Monireh Ghazaeian[2]

[1] Fellowship of Critical Care Pharmacotherapy, Department of Pharmacotherapy in SINA Hospital, Tehran University of Medical Science, Tehran, Iran

[2] Pharmacotherapist, Department of Clinical Pharmacy, Faculty of Pharmacy, Mazandaran University of Medical Sciences, Sari, Iran

*** Corresponding author:** Shayesteh Gheibi, Department of Pharmacotherapy in SINA Hospital, Tehran University of Medical Science, Tehran, Iran

Article Info	A B S T R A C T
Article type: Original article	**Background and Aim:** Embolic stroke of undetermined source (ESUS) refers to patients with nonlacunar cryptogenic ischemic strokes. In these patients, embolism is the probable stroke mechanism (1). ESUS is followed by high stroke recurrence, then we should know about a clear risk prediction and management of it to improve prognosis (2). A randomized controlled trial (NAVIGATE ESUS) manifested that rivaroxaban is not more effective than aspirin in stopping recurrent stroke after an estimated embolic stroke from an undetermined source. It is unclear that whether dabigatran could be effective in restricting recurrent strokes after this type of stroke or not? It has been hypothesized that dabigatran could be more effective than antiplatelet therapy for secondary stroke prevention in ESUS patients. We study available online data about ESUS.
	Materials and Methods: We carried out a manual searching of bibliographies and citations for the number of studies. The question that came to our mind was whether consumption of dabigatran, the oral thrombin inhibitor, within three-months after embolic stroke of undetermined source, is superior to acetylsalicylic acid for restriction of recurrent stroke or not?
	Results: In the RE-SPECT ESUS trial, a median follow-up 19 months of 5390 patients, recurrent strokes took place (7.7%) in the aspirin group and 6.6% in the dabigatran group. Ischemic strokes happened 4.7% and 4.0%per year, respectively. Major bleeding chanced 1.4% per year in the aspirin group and 1.7% per year in the dabigatran group. Clinically relevant non-major bleeding came about 0.9% per year and 1.6% per year, respectively (3). Dabigatran was not superior to aspirin in restricting recurrent stroke in patients with a late history of embolic stroke of undetermined source. The outbreak of major bleeding in the dabigatran group was not higher than the aspirin group. Ultimately clinically minor bleeding events were more probable in the dabigatran group (4). **Conclusion:** Dabigatran is not superior to aspirin in preventing recurrent stroke.