Mini Review

Dual anti-platelet therapy (DAPT) is a standard procedure for patients undergoing percutaneous coronary intervention (PCI) using stents [1,2], whereas oral anticoagulation (OAC) is necessary, when CHADS2-VASc scores ≥ 2, to reduce stroke and embolic events in patients with atrial fibrillation (AF) [3,4]. Coronal artery disease (CAD) and AF often coexist in same patient, approximately 5-10% of patients who underwent PCI have AF [5,6]. Some studies have reported that DAPT with OAC (triple antithrombotic therapy [TT]) reduces major cardiovascular events and mortality compared with DAPT only in patients who underwent PCI with AF [7,8]. On the other hand, others have found that TT increases the bleeding and cardiovascular events [9,10]. Therefore, the optical combination antithrombotic therapy for the patients with AF undergoing PCI is uncertain.

The 2012 American College of Chest Physicians (ACCP) guidelines recommended TT (eg, OAC, aspirin and clopidogrel) for patients with AF (CHADS2 score of 2 or greater) who undergoing PCI during the first month after placement of a bare-metal stent or first 3 to 6 months after placement of a drug-eluting stent. After this initial period of TT, OAC plus a single antiplatelet drug is recommended. At 12 months after PCI, OAC alone is suggested as for patients with AF and CAD (Grade 2C) [11]. The 2016 European Society of Cardiology (ESC) guidelines recommended TT during the first month after PCI (stable CAD and acute coronary syndrome with low bleeding risk). After that, recommendation of antithrombotic therapy was same as the 2012 ACCP guidelines (class IIa, evidence level B or C) [12]. When a direct oral anticoagulant (DOAC) is used as for OAC, the consensus recommendation is that the lowest dose effective for stroke prevention in AF should be considered.

Recently, DOAC is broadly used as for OAC instead of vitamin K antagonism (VKA) in patients with AF and venous thromboembolism. However, the patients of chronic kidney disease, high age and lean do not have the adaptation of DOAC. Among the patients with AF who undergoing PCI, the patients who do not have the adaptation of DOCA are not a little and these patients need to use VKA as for OAC.

This issue of TT is still controversy. Ongoing trials will inform about combination therapies in the future.

References


