ESC focused update on dual antiplatelet therapy in coronary artery disease published today

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The first ESC Focused Update on Dual Antiplatelet Therapy in Coronary Artery Disease is published online today in European Heart Journal, and on the ESC website. The document was developed in collaboration with the European Association for Cardio-Thoracic Surgery (EACTS).

"Dual antiplatelet therapy (DAPT) is a controversial topic on which a lot of conflicting evidence has been generated," said Dr Marco Valgimigli (Switzerland), Task Force Chairperson. "This has led to a great deal of uncertainty in the medical community, particularly regarding the optimal duration of DAPT after coronary stenting."

DAPT is among the most intensively investigated treatments in the field of cardiovascular medicine. Research has focused on the refinement of P2Y1,2 inhibition strategies and optimal treatment duration. This document provides recommendations on DAPT in patients with coronary artery disease (CAD).

Chapters are devoted to DAPT and percutaneous coronary intervention (PCI), DAPT and cardiac surgery, DAPT for patients with medical managed acute coronary syndrome (ACS), DAPT for patients with an indication for oral anticoagulation, elective non-cardiac surgery in patients on DAPT, and DAPT in specific populations including women, patients with diabetes mellitus, and patients who develop bleeding during
treatment.

DAPT reduces the risk of acute to very late stent thrombosis, and after myocardial infarction (MI) or PCI it reduces the rate of spontaneous MI. The risk of bleeding in patients on DAPT is proportionally related to its duration. The benefits of prolonged DAPT, especially on mortality, depend on prior cardiovascular history (such as prior ACS/MI versus stable CAD). The document recommends the use of prediction models to estimate on-DAPT bleeding risk, and advocates an individualised approach based on ischaemic versus bleeding risks.

The most contentious issue was the need for a prolonged DAPT regimen (beyond 12 months) in ACS patients treated with PCI. "This is a setting in which one needs to think twice about how to maximise the benefits over the risks," said Dr Valgimigli. "The most novel and important message here is that DAPT is a regimen to treat a patient, not the previously implanted stent. This is crucial and the community needs to adapt to this new treatment paradigm."

The Task Force recommends that for ACS patients, the default DAPT duration should be 12 months, irrespective of the revascularisation strategy (medical therapy, PCI or coronary artery bypass graft surgery [CABG]). Six months of DAPT should be considered in patients at high bleeding risk. Therapy longer than 12 months may be considered in ACS patients who have tolerated DAPT without a bleeding complication.

The document emphasises that the need for a short DAPT regimen should no longer justify the use of bare metal stents instead of newer generation drug-eluting stents (DES). DAPT duration should be guided by an assessment of the individual patient's ischaemic versus bleeding risks and not by the stent type.

Irrespective of the type of metallic stent implanted, the duration of
DAPT in stable CAD patients treated with PCI should be one to six months depending on the bleeding risk. A longer DAPT duration may be considered in patients whose ischaemic risk is greater than the risk of bleeding.

There is insufficient data to recommend DAPT in stable CAD patients treated with CABG.

The addition of DAPT to oral anticoagulation therapy increases the risk of bleeding complications by two- to three-fold. The indication for oral anticoagulation should be reassessed and treatment continued only if there is a compelling indication such as atrial fibrillation, a mechanical heart valve, or recent history of recurrent deep venous thrombosis or pulmonary embolism. The duration of triple therapy (DAPT plus oral anticoagulation) should be limited to six months or omitted after hospital discharge depending on the ischaemic and bleeding risks.

Clopidogrel is recommended as the default P2Y1,2 inhibitor in patients with stable CAD treated with PCI, patients with an indication for oral anticoagulation, and ACS patients in whom ticagrelor or prasugrel are contraindicated. Ticagrelor or prasugrel is recommended for ACS patients unless there are drug-specific contraindications. The decision on when to initiate a P2Y1,2 inhibitor depends on both the specific drug and the specific disease (stable CAD versus ACS).

A similar type and duration of DAPT therapy are recommended for male and female patients, and for patients with and without diabetes mellitus.

Dr Valgimigli said: "The Task Force advocates a personalised medicine approach where each treatment and its duration is individualised as much as possible. The document highlights who should, and should not, receive long-term treatment, while at the same time outlining how to
maximise the expected benefits over the risks."

A unique aspect of this Focused Update is the accompanying Clinical Cases companion document in which the Task Force shows how to use the recommendations in real life challenging cases submitted by the medical community.


Provided by European Society of Cardiology


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