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ESC guidelines recommend radial approach for percutaneous coronary interventions in ACS

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For the first time, ESC Guidelines published today give the highest degree of recommendation for the radial approach over the femoral one for coronary angiography and percutaneous coronary intervention (PCI) in patients with acute coronary syndromes (ACS). The ACS without persistent ST-segment elevation (NSTE-ACS) guidelines, drafted by an international multidisciplinary Task Force, are published online in *European Heart Journal* and on the ESC Website.

"New data shows that the radial approach is superior to the femoral not only in terms of vascular complications and major bleeding events but also in reducing all-cause mortality," said Professor Marco Roffi (Switzerland), Task Force Chairperson. "It is recommended that centres treating ACS patients implement a transition from transfemoral to transradial access. However, proficiency in the femoral approach should be maintained, as this access is indispensable in a variety of procedures, including intra-aortic balloon counterpulsation implantation, structural heart disease interventions, and peripheral revascularization procedures."

A new, shorter algorithm for diagnosis in patients with suspected non-ST-elevation myocardial infarction (NSTEMI) is introduced. When high-sensitivity troponin assays are available, blood tests can be done at presentation and after 1 hour instead of the current practice of 3 hours. Professor Carlo Patrono (Italy), Task Force Co-Chairperson, said: "Both algorithms are equally good and either can be used. The 1 hour protocol

accelerates diagnosis and consequent treatment or rules out NSTEMI so patients can be discharged or investigated for other conditions. This should translate to shorter stays in the emergency department."

While the general recommendation of dual antiplatelet therapy (DAPT) for one year remains, a tailored duration (i.e., shortened to 3-6 months or extended up to 30 months) is now allowed in selected patients at high bleeding or ischaemic risk, respectively. "The duration of DAPT is a hot topic," said Professor Marco Roffi. "With improved drug-eluting stent technology, stent thrombosis rates have dropped dramatically and recent data suggests that shorter duration of DAPT in patients at high bleeding risk is safe and effective. In addition, new data shows that DAPT beyond one year is effective in reducing ischaemic events in selected patients at high ischaemic and low bleeding risk."

The most controversial area discussed by the Task Force was the optimal time to give P2Y12 inhibitors to NSTE-ACS patients scheduled for invasive assessment. The 2011 Guidelines3 recommended the antiplatelet drug be given as soon as a diagnosis was made, independently of when the patient would undergo coronary angiography (called pretreatment). The first study designed to test the impact of P2Y12 inhibitor pretreatment in ACS showed that prasugrel pretreatment resulted in more bleeding events compared to giving the drug at the time of coronary angiography/PCI in the absence of a reduction in ischaemic events.

"Prasugrel pretreatment is now contraindicated, which is a change of paradigm," said Professor Patrono. "In retrospect, we were over confident about the value of P2Y12 inhibitor pretreatment. With respect to ticagrelor and clopidogrel, the optimal timing of drug administration in patients scheduled for an invasive strategy has not been properly studied, so we do not give any recommendation for or against pretreatment. This is a gap in evidence that requires further research."

Guidance on the minimum duration of cardiac rhythm monitoring (none, 24 hours) in patients with NSTE-ACS is given for the first time, depending on clinical presentation. Professor Roffi said: "We give recommendations to streamline the stay of patients in monitored units. This may reduce length of stay in hospital and costs."

There is a new section on the complex issue of managing antiplatelet therapy in patients requiring chronic oral anticoagulation. Additional new sections concern the treatment of bleeding related to antithrombotic therapy, management of antiplatelet agents in patients requiring coronary bypass surgery, and NSTE-ACS patients with atrial fibrillation or undergoing noncardiac surgery.

Also published today are three companion manuscripts4 with questions and answers on diagnosis and risk assessment; antithrombotic therapy; and coronary revascularization in NSTE-ACS. "Guidelines are based on populations in large trials," said Professor Roffi. "The companion papers give detailed advice, based on the guidelines, on managing individual patients."

Professor Patrono concluded: The guidelines published today provide the most contemporary evidence-based advice for physicians on how to diagnose and treat their patients with NSTE-ACS."

More information: ESC Guidelines for the management of acute coronary syndromes in patients presenting without persistent ST-segment elevation. European Heart Journal. 2015. DOI: 10.1093/eurheartj/ehv32

ESC Guidelines on the ESC Website: www.escardio.org/Guidelines-&-… delines-list/listing

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