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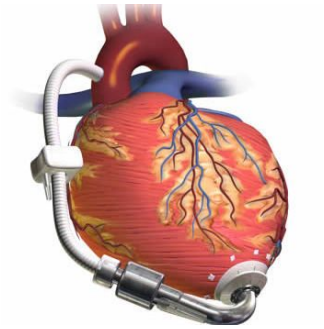
Uninterrupted Vitamin-K Antagonists during Ablation and Device Implantation



The European Society of Cardiology (ESC) has recommended uninterrupted anticoagulation with vitamin K antagonists during ablation and device implantation in a position paper presented at EHRA EUROPACE – CARDIOSTIM 2015 and published in EP Europace.

“Antithrombotic management in patients undergoing electrophysiology procedures’ was produced by the European Heart Rhythm Association (EHRA), a registered branch of the ESC, and is endorsed by the ESC Working Group on Thrombosis, the Heart Rhythm Society (HRS) in the US and the Asia Pacific Heart Rhythm Society (APHRS).

Professor Christian Sticherling, chair of the writing group, said: “Traditionally we interrupted anticoagulation during device implantation and restarted it afterwards. And we bridged with heparin around the time of the operation. The new recommendation is to continue to give the vitamin K antagonist and perform the operation without any bridging. That shows the lowest rate of perioperative bleeding.”

He added: “Also new is the recommendation not to interrupt vitamin K antagonists during ablation and particularly during pulmonary vein isolation which is the most common type of ablation nowadays.”

The recommendations published today are an update of EHRA’s 2008 consensus document.3 Dramatic changes in the field during the last five years demanded a revision. There has been a steep rise in device implantation and even greater increases in ablation procedures, mainly pulmonary vein isolation. Since 2008 new drugs have been introduced, namely the non-vitamin K antagonist oral anticoagulants (also called new oral anticoagulants or NOACs) and the antiplatelets prasugrel and ticagrelor.

“We now have a whole range of new possibilities to combine anticoagulation with platelet inhibition,” said Professor Sticherling. “At the same time we perform more invasive electrophysiology procedures in which most patients are on anticoagulation. This combination meant an update was needed to help physicians achieve the dual aims of avoiding thromboembolic events and minimising the risk of bleeding.”

Three main topics are covered: antithrombotic management in patients undergoing ablation for various conditions such as atrial fibrillation; antithrombotic management for the implantation or exchange of cardiac implantable electronic devices (CIEDs) including pacemakers, implantable cardioverter defibrillators (ICDs) and cardiac resynchonisation therapy (CRT) systems; and peri-interventional bleeding complications on concurrent antiplatelet therapy.

Recommendations on NOACs are given for the first time. The authors acknowledge that the field of NOACs and device implantation is rapidly evolving. They state: “Whether it is better to operate without interrupting these new agents or with temporary cessation is currently unclear, and more data are required.” The document recommends interruption of NOACs for device surgery, without heparin bridging. This advice is consistent with the EHRA Practical Guide on the use of NOACs in patients with non-valvular atrial fibrillation.4 The period of discontinuation should be based on individual product monographs, and the drug restarted 24 to 48 hours after surgery.

“One of the key messages is that there is no heparin bridging because this causes bleeding complications,” said Professor Sticherling. The document also recommends interrupting NOACs during ablation with pulmonary vein isolation, with the last dose given 24 hours before in patients with normal renal function. “We gathered the recent evidence to make our recommendations but new studies are on the way,” said Professor Sticherling. “I can almost predict that within a year we will have enough proof to recommend uninterrupted NOACs during ablation.”

The most controversial topic was the use of transoesophageal echocardiography (TEE) to screen for thrombi prior to ablation to prevent strokes. “Virtually all Europeans do TEE before ablation even if the stroke risk is low or the patient presents in sinus rhythm,” said Professor Sticherling. “The Americans have a higher threshold for performing TEE and this generated a lot of debate. We came to a consensus on when TEE should be used, and when it could be considered.”

He concluded: “This is a practical document which gives new advice on vitamin K antagonists and the first recommendations on NOACs. The aim of the recommendations is to avoid all thromboembolic complications while minimising bleeding.”

Source: European Society of Cardiology

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