

# Clinical Practice Guidelines on Perioperative Cardiovascular Evaluation: collaborative efforts among the American College of Cardiology, the American Heart Association, and the European Society of Cardiology

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This editorial refers to '2014 ESC/ESA Guidelines on noncardiac surgery: cardiovascular assessment and management', by The Joint Task Force on non-cardiac surgery: cardiovascular assessment and management of the European Society of Cardiology (ESC) and the European Society of Anaesthesiology (ESA), on page 2383.

The American College of Cardiology (ACC), the American Heart Association (AHA), and the European Society of Cardiology (ESC) are pleased to announce the publication of two new versions of Clinical Practice Guidelines (CPGs) on Perioperative Cardiovascular Evaluation from our respective organizations. <sup>1–3</sup>

These revisions were begun independently, dictated both by emerging, new information regarding the topic and the controversy regarding the legitimacy of data from previously published pivotal trials. Accordingly, the leadership of these international organizations recognized the importance of scientific collaboration and writing committee coordination for the benefit of the worldwide cardiology community. A joint statement was therefore posted in August 2013<sup>4–6</sup> to indicate that the respective CPGs were under revision and to provide some guidance regarding perioperative beta-blockade therapy in the interim.

Since then, the members of both ESC and ACC/AHA guideline writing committees have reviewed the evidence thoroughly and systematically. The writing committees and the two supervisory task force groups decided to analyse separately the evidence about beta-blocker therapy used in the perioperative period and to develop specific treatment recommendations as a first step in the process of revision. After this independent work, the revised

recommendations were shared between the two writing committees so that the rationales for any differences in recommendations could be articulated clearly. As a result of this process, we are confident that the evidence base has been objectively reviewed by two independent expert writing committees.

The development of the two revised CPGs on perioperative cardiovascular care underscores the benefits of collaboration. Although the writing committees compiled and reviewed the evidence separately, they subsequently came together to validate their analyses, finding that they had both drawn on the same data and reached similar conclusions. Additionally, discussions are ongoing among the ACC, AHA, and ESC about sharing resources related to the systematic review of evidence. The potential advantages of more highly structured joint CPG initiatives are under active consideration.

The CPGs on cardiovascular care in the perioperative period represent a fresh and objective review of old and new evidence in this important clinical arena. Features of the CPGs include the latest synthesis of the data on the use of beta-blockers in patients who have taken them chronically, considerations regarding selection of patients who are potential candidates to receive beta-blockers pre-operatively, and guidance regarding how to use this important and powerful class of drugs in the perioperative period. Clinicians will find the recommendations in these revised CPGs useful in their daily work and can be reassured that the recommendations have been vetted thoroughly by the most rigorous scientific process. Furthermore, the recommendations in both documents are fundamentally aligned, so that cardiovascular clinicians worldwide may deliver optimal, standardized care.

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#### CARDIOVASCULAR FLASHLIGHT

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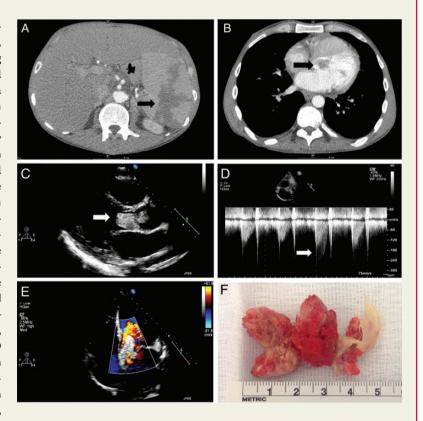
## Feeling dizzy? A giant incidental finding

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A 39-year-old gentleman with known HIV, on antiretroviral therapy with an undetectable viral load, treated Hepatitis C, and a recent intravenous drug user presented with abdominal pain and general malaise over 6 weeks. He had recently finished a course of flucloxacillin for left foot cellulitis. On examination, he was afebrile, cachectic, had no stigmata of infective endocarditis, a possible flow murmur and a tender left hypochondrium with normal bowel sounds. A chest xray and abdominal xray were unremarkable. Bloods showed a white cell count of 5.8 ( $\times$  10 $^{9}$ /L) and a C-reactive protein of 108 mg/L. A CT chest and abdomen was performed that showed splenic infarcts (areas of low attenuation with arrow in Panel A) and a mass on the aortic valve (Panel B; arrow). He then had an echocardiogram that confirmed the presence of a large mass attached to the aortic valve prolapsing in and out of the left ventricular outflow tract (Panel Cparasternal long-axis view of mass with arrow, see Supplementary material online, Video; Panel D showing continuous wave Doppler trace through the aortic valve with intermittent obstruction signified with arrow; Panel E-5 chamber view with colour flow, Supplementary material online, Video),



and no further vegetations. On further questioning he stated that he had been dizzy over the last couple of days particularly when he stood. He was taken for immediate surgery after blood cultures and antibiotics. A  $4.2 \times 2$  cm mass was excised from his aortic valve (*Panel F*), subsequently shown to be candida, and replaced with a mechanical aortic valve.

Supplementary material is available at European Heart Journal online.

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