

2019 guidelines for the diagnosis and management of chronic coronary syndromes: congratulations and criticism

The ESC released the new guidelines for the diagnosis and management of chronic coronary syndromes (CCS) in August 2019.¹ On November 14, a corrigendum was published in the *European Heart Journal*² following some comments and suggestions.^{3,4}

We would like to congratulate the authors of the guidelines, particularly for the first part related to symptoms and to the diagnostic flowcharts. A new and more precise terminology has been proposed [CCS instead of coronary artery disease (CAD)] and, for the pretest probability model, a contemporary prevalence of CCS has been adopted, enriched by the addition of several risk factors. For the first time, dyspnoea is considered an ischaemic equivalent. Congratulations for anticipating the still unpublished suggestions of the 'ISCHAEMIA' trial and suggesting as the first diagnostic test for CCS coronary computed angiography (CTA) (to detect coronary anatomy) or non-invasive functional imaging (to detect ischaemia) with a relative downgrading of the 'old' exercise ECG. This, obviously, is good for those who can afford CTA or can perform a reliable non-invasive test. Congratulations also for all the prevention suggestions, in terms of lifestyle changes, reduction of progression of coronary atherosclerosis, and, in particular, prevention of thrombus formation. For the latter, the guidelines consider in detail all of the different scenarios: whether patients are in sinus rhythm or in atrial fibrillation or whether they have experienced a myocardial infarction or not, and provide clear indications on how to use aspirin, antiplatelet therapies (and which one), as well as the non-vitamin K antagonist oral anticoagulants and the concomitant use of proton pump inhibitors.

The problems with these guidelines relate to the approach to antianginal treatments. The 2013 guidelines were severely criticized for categorizing antianginal drugs in first- and

second-line treatment without supporting scientific evidence.^{5–8} The criticism, unfortunately, remains for the 2019 guidelines. Despite the test which states that there is no evidence that one class of drugs is superior to another, the flowchart continues to recommend a stepwise strategy with first-, second-, even third-, and, in some instances, fourth-line drugs, and also contradicts the recommendations provided by the Regulatory Agencies (EMA and FDA) which have generated the publication of the corrigendum.² It is not clear how treatment with beta-blockers has the highest level of labelling, 1A, in the absence of multiple randomized trials (RCTs), while other classes of drugs with more contemporary and well-conducted RCTs are considered only a third step. There is an inexplicable upgrade for the use of long-lasting nitrates based mainly on rather personal opinions in the absence of new supporting studies and evidence that these drugs do not have any significant additive antianginal effect.3,4 Taking into consideration the multiplicity of mechanisms that can cause myocardial ischaemia and CCS, and in the absence of evidence that any drug is superior to another, it would have been better, as was done for the hypertension guidelines,9 to leave the choice of treatment to the practitioners, according to the pathophysiology of CCS or to patients' comorbidities.

The recommendations for myocardial revascularization of CCS are rather scanty and basically the reader is referred to the 2018 ESC myocardial revascularization guidelines. ¹⁰ However, even these are facing some criticism as the European Association of Cardio-Thoracic Surgery has withdrawn its support as the guidelines recommended both stents and heart surgery for low-risk patients, largely based on the results of the EXCEL trial which is raising concerns related to the definition of heart attack. ¹¹

Writing a guideline is a duty and a gift for a few experts on behalf of the entire medical community. It is not an easy job, particularly in the absence of appropriate and contemporary data. This generates a lot of congratulations but also some criticism. Probably, for the 2019 guidelines on CCS, the congratulations will be more than the criticism.

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References

- Knuuti J, Wijns W, Saraste A, Capodanno D, Barbato E, Funck-Brentano C, Prescott E, Storey RF, Deaton C, Cuisset T, Agewall S, Dickstein K, Edvardsen T, Escaned J, Gersh BJ, Svitil P, Gilard M, Hasdai D, Hatala R, Mahfoud F, Masip J, Muneretto C, Valgimigli M, Achenbach S, Bax JJ; ESC Scientific Document Group. 2019 ESC guidelines for the diagnosis and management of chronic coronary syndromes. Eur Heart J 2020;41:407–477.
- Corrigendum. Eur Heart J ehz825, https://doi.org/ 10.1093/eurheartj/ehz825
- Camici PG. Crea F, Ferrari R. Commentary: the new ESC guidelines for the diagnosis and management of chronic coronary syndromes. *Int J Cardiol* 2019;297:19–21.
- Ferrari R, Pavasini R, Censi S, Squeri A, Rosano G. The new ESC guidelines for the diagnosis and management of chronic coronary syndromes: the good and the not so good. *Curr Probl Cardiol* 2020:in press.
- Ferrari R, Camici PG, Crea F, Danchin N5, Fox K, Maggioni AP, Manolis AJ, Marzilli M, Rosano GMC, Lopez-Sendon JL. The 'diamond' approach for a personalized treatment of angina. *Nat Rev Cardiol* 2018;**15**:120–132.
- Manolis AJ, Poulimenos LE. Ambrosio G, Kallistratos MS, Lopez-Sendon J, Dechend R, Mancia G, Camm AJ. Medical treatment of stable angina: a tailored therapeutic approach. *Int J Cardiol* 2016;220:445–453.
- Thadani U. Management of stable angina—current guidelines: a critical appraisal. Cardiovasc Drugs Ther 2016;30:419–426.
- Ferrari R, Pavasini R, Camici PG, Crea F, Danchin N, Pinto F, Manolis A, Marzilli M, Rosano GMC, Lopez-Sendon J, Fox K. Anti-anginal drugs beliefs and evidence: systematic review covering 50 years of medical treatment. Eur Heart J 2019; 40:190–194.
- Williams B, Mancia G, Spiering W, Agabiti Rosei E, Azizi M, Burnier M, Clement DL, Coca A, de Simone G, Dominiczak A, Kahan T, Mahfoud F, Redon J, Ruilope L, Zanchetti A, Kerins M, Kjeldsen SE, Kreutz R, Laurent S, Lip GYH, McManus R, Narkiewicz K, Ruschitzka F, Schmieder RE, Shlyakhto E, Tsioufis C, Aboyans V, Desormais I; ESC Scientific Document Group. 2018 ESC/ESH guidelines for the management of arterial hypertension. Eur Heart J 2018;39: 3021–3104.
- Neumann FJ, Sousa-Uva M, Ahlsson A, Alfonso F, Banning AP, Benedetto U, Byrne RA, Collet JP, Falk V, Head SJ, Jüni P, Kastrati A, Koller A, Kristensen SD, Niebauer J, Richter DJ, Seferovic' PM, Sibbing D, Stefanini GG, Windecker S, Yadav R, Zembala MO. ESC Scientific Document

Group, 2018 ESC/EACTS Guidelines on myocardial revascularization, Eur Heart | 2019;40:87–165.

Stone GW, Sabik JF, Serruys PW, Simonton CA, Généreux P, Puskas J, Kandzari DE, Morice MC, Lembo N, Brown WM 3rd, Taggart DP, Banning A, Merkely B, Horkay F, Boonstra PW, van Boven AJ, Ungi I, Bogáts G, Mansour S, Noiseux N, Sabaté M, Pomar J, Hickey M, Gershlick A, Buszman P, Bochenek A, Schampaert E, Pagé P, Dressler O, Kosmidou I, Mehran R, Pocock SJ,

Kappetein AP; EXCEL Trial Investigators. Everolimus-eluting stents or bypass surgery for left main coronary artery disease. N Engl J Med 2016;375:2223–2235.

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