What do we really know about chronic coronary syndrome?

Vedrana Baraban[1,2]*, Nika Srb[3], Ninoslava Vonić[2,4]

[1]Health Center Osijek-Baranja County, Osijek, Croatia
[2]Josip Juraj Strossmayer University of Osijek Faculty of Dental Medicine and Health Osijek, Osijek, Croatia
[3]Josip Juraj Strossmayer University of Osijek, Faculty of Medicine Osijek, Osijek, Croatia
[4]University Hospital Centre Osijek, Osijek, Croatia

KEYWORDS: chronic coronary syndrome, coronary artery disease.

CITATION: Cardiol Croat. 2026;21(1-2):12. | https://doi.org/10.15836/ccar2026.12

***ADDRESS FOR CORRESPONDENCE:** Vedrana Baraban, Dom zdravlja Osječko-baranjske županije, Petra Preradovića 2, HR-31400 Đakovo, Croatia. / Phone: +385-91-1227-772 / E-mail: barabanvedrana@gmail.com

ORCID: Vedrana Baraban, https://orcid.org/0009-0000-9996-1204 • Nika Srb, https://orcid.org/0000-0001-9587-5413 Ninoslava Vonić, https://orcid.org/0009-0007-1130-3292

The 2019 ESC guidelines first introduced chronic coronary syndrome (CCS) as a more comprehensive, diagnostically and therapeutically demanding clinical entity than the previous term stable angina pectoris. It includes the clinical presentation of coronary artery disease (CAD) that occurs during a stable period of coronary disease, after or preceding acute coronary syndrome. CCS encompasses various clinical presentations of stable ischemic heart disease. Thanks to new insights into the pathophysiological mechanism of ischemia, CCS is not associated exclusively with obstructive atherosclerotic disease of the epicardial coronary arteries, but also with functional and structural disorders of the microcirculation, vasospasm and endothelial dysfunction, i.e. anginal disorders within the framework of angina/ischemia with no obstructive coronary artery disease (ANOCA/INOCA). Men have about 50% higher risk of developing CCS, but ANOCA/INOCA clinical entities are higher in women. Along with atherosclerotic vascular changes (risk factors: diabetes, arterial hypertension, obesity, dyslipidemia), nonvascular causes of CSS are increasingly being investigated in the pathogenesis of myocardial ischemia, such as myocardial metabolic disorders, coronary flow changes due to platelet activation, microembolization, and endothelial inflammation. According to the 2024 ESC guidelines, there are 5 categories of CSS: patients with proven coronary artery disease and anginal disorders during exercise, patients with anginal disorders (vasospasm or microcirculatory disease) but without obstructive coronary disease (ANOCA/INOCA), patients with stable symptoms after ACS or revascularization, patients with stable symptoms and heart failure of ischemic or cardiometabolic etiology, and the asymptomatic category in which CAD was detected by invasive or noninvasive imaging methods, due to other indications. It is crucial to identify and effectively manage all aspects of Chronic Stable Syndrome (CSS) promptly, as they often go undiagnosed despite causing significant morbidity, reduced quality of life, and cardiovascular complications such as arrhythmias, valvular diseases, heart failure, and major adverse cardiac events (MACE). Although there has been notable progress in understanding the mechanisms behind CSS and in current treatments—including lifestyle modifications—a considerable number of patients, particularly those asymptomatic, remain undetected. Additionally, further clinical research is needed to refine antianginal therapies and invasive coronary procedures, aiming for comprehensive and long-term stabilization of CSS.[1-4]

RECEIVED:
October 19, 2025

ACCEPTED:
November 14, 2025

LITERATURE

1. Vrints C, Andreotti F, Koskinas KC, Rossello X, Adamo M, Ainslie J, et al; ESC Scientific Document Group. Linee guida ESC 2024 per la gestione delle sindromi coronariche croniche [2024 ESC Guidelines for the management of chronic coronary syndromes]. G Ital Cardiol. 2024;25(Suppl. 1):e1-e132. Italian. https://doi.org/10.1714/4375.43725
2. Roth GA, Mensah GA, Johnson CO, Addolorato G, Ammirati E, Baddour LM, et al; GBD-NHLBI-JACC Global Burden of Cardiovascular Diseases Writing Group. Global Burden of Cardiovascular Diseases and Risk Factors, 1990-2019: Update From the GBD 2019 Study. J Am Coll Cardiol. 2020 Dec 22;76(25):2982-3021. https://doi.org/10.1016/j.jacc.2020.11.010
3. Gutiérrez E, Flammer AJ, Lerman LO, Elízaga J, Lerman A, Fernández-Avilés F. Endothelial dysfunction over the course of coronary artery disease. Eur Heart J. 2013 Nov;34(41):3175-81. https://doi.org/10.1093/eurheartj/eht351
4. Trask AJ, Katz PS, Kelly AP, Galantowicz ML, Cismowski MJ, West TA, et al. Dynamic micro- and macrovascular remodeling in coronary circulation of obese Ossabaw pigs with metabolic syndrome. J Appl Physiol (1985). 2012 Oct;113(7):1128-40. https://doi.org/10.1152/japplphysiol.00604.2012