

# Razlike između Smjernica National Institute for Health and Care Excellence i European Society of Cardiology u dijagnostičkoj obradi bolova u prsnom košu i stabilne koronarne bolesti srca

## Differences between National Institute for Health and Care Excellence and European Society of Cardiology guidelines in the diagnosis of chest pain and stable coronary artery disease

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**Uvod:** Bol u prsima je najčešći simptom koronarne bolesti srca (CAD). Prijašnji pregledi literature u kojima je uključena 31 država pokazuju da je prosječna prevalencija boli u prsnom košu 5,7% u muškaraca i 6,7% u žena.<sup>1</sup> Prevalencija bolova prsnom košu u primarnoj zdravstvenoj zaštiti u bolesnika s definitivno dokazanom CAD je čak i niža, svega 1-2%.<sup>2</sup> Stoga, je jasno da svaka bol u prsima nije nužno povezana s CAD i liječnici se koriste različitim metodama kako bi predvidjeli i dijagnosticirali CAD u bolesnika koji imaju bol u prsnom košu. Kardiološka klinička praksa u Velikoj Britaniji oslanja se na Smjernice NICE (*National Institute for Health and Care Excellence*) te na Smjernice Europskog kardiološkog društva (ESC). Većina europskih država, uključujući i Hrvatsku, koristi Smjernice ESC-a. Stoga ovaj članak uspoređuje razlike između smjernica ESC i NICE koje utječu na prosudbu liječnika u dijagnostici i liječenju bolesnika s bolovima u prsima i bolesnika sa stabilnom CAD.

**Usporedba smjernica:** Tijekom 2010. godine NICE je publicirala Smjernice za dijagnozu stabilne CAD, a 2011. za liječenje stabilne CAD. Nedavno, u studenome 2016. godine, NICE je nadopunila i obnovila te smjernice.<sup>3</sup> U ovim nadopunama najviše se ističe procjena vjerojatnosti da bolesnik ima CAD, koja se vrši prije samih dijagnostičkih testova (*pre-test probability assessment*) te široka upotreba kompjutorizirane tomografije (CT) u dijagnostici CAD. Zadnje Smjernice Europskog kardiološkog društva za dijagnozu i liječenje stabilne CAD izdane su 2013. godine. Ove ESC smjernice objedinile su i dijagnostiku i liječenje stabilne CAD s obzirom na jakost dokaza i preporuke prema klasama koje ne nalazimo u Smjernicama NICE gdje su dane jednostavne upute bez jasnih navoda jakosti dokaza. No za razliku od ESC u smjernicama NICE se jasno navodi isplativost provedenih postupaka.

**Zaključak:** Postoje razlike između smjernica NICE i ESC koje definitivno utječu na kliničku praksu u dijagnostici bolesnika s bolovima u prsnom košu i sa stabilnom CAD. Smjernice ESC za dijagnozu ova dva entiteta uglavnom se baziraju na funkcionalnom/stres testu. Preporuke NICE idu korak dalje od test opterećenja, upotrebljavajući preciznije slikovne metode, a po zadnjim smjernicama iz 2016. godine, 64 slojna CT-angiografija postaje prvi izbor u slikovnim metodama za dijagnozu boli u prsnom košu i CAD.

**Introduction:** Chest pain is the most frequent symptom of coronary artery disease (CAD). Previous systematic review including 31 countries found average weighted prevalence of angina in males to be 5.7% and 6.7% in women.<sup>1</sup> In primary care the prevalence of patients presenting with chest pain that ultimately have CAD, is even lower, estimated to be around 1-2%.<sup>2</sup> Not every chest pain is associated with CAD, and physicians are using various methods to predict and diagnose CAD in patients with chest pain. Cardiology practice in the UK is guided by the use of National Institute for Health and Care Excellence (NICE) and European Society of Cardiology (ESC) Guidelines. Cardiologists in Europe guide their decisions according to ESC guidelines. This review is comparing scientific background for differences between most recent NICE and ESC guidelines in the diagnosis of chest pain and stable CAD that guide physician's decision making in daily clinical practice.

**Comparison of Guidelines:** In 2010 NICE published guidelines for diagnosis, and in 2011 for management of stable CAD. In November 2016, NICE published update of those guidelines.<sup>3</sup> This update consist of two important changes considering the use of pre-test probability assessment, and introduction of wide use of cardiac CT in the diagnosis of CAD. The last ESC guidelines for diagnosis and management of stable CAD were published in 2013. ESC Guidelines combined both CAD diagnostic and management guidelines. Statements are given according to the class of recommendation and level of evidence. This form of guidance is not applied in NICE, where rather simple statements are used. ESC guidelines do not assess cost-effectiveness of the recommendation, as opposed to the NICE Guidelines.

**Conclusion:** Differences exist between NICE and ESC guidelines affecting clinical practice in approaching diagnosis of chest pain and stable CAD. The ESC pathway for diagnosis of chest pain is based on the functional/stress imaging, that can be replaced with exercise ECG if stress imaging facilities are not locally available. On the other hand, NICE guidelines moved away from exercise ECG, first towards more accurate functional stress imaging modalities, and later, according to the last update from 2016, towards 64-slice CT coronary angiography as a first line imaging modality.

### LITERATURE

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