New ESC guidelines on pericardial diseases published today

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New ESC Guidelines on pericardial diseases are published today. Until now there was insufficient evidence for strong recommendations in this group of conditions which can severely restrict quality of life.

"Pericardial diseases include different clinical presentations and various aetiologies that require appropriate management," said Professor Yehuda Adler, Co-Chairperson of the guidelines Task Force. "We hope these new recommendations will help clinicians to manage these diseases with resulting improvements in outcomes and quality of life."

The 2015 ESC Guidelines on the diagnosis and management of pericardial diseases are published online in *European Heart Journal* and on the ESC Website. Previous ESC Guidelines on this topic were published in 2004.

The pericardium (meaning "around" and "heart") is a double-walled sac containing the heart and the roots of the great vessels. It provides lubrication and protection from infection. Pericardial diseases may be isolated or part of a systemic disease. The main pericardial syndromes are pericarditis, pericardial effusion, cardiac tamponade, constrictive pericarditis and pericardial masses. Medical therapies for this group of diseases are off-label since no drug has been registered for a specific pericardial indication.

Pericarditis accounts for about 5% of emergency room admissions for chest pain. The long-term prognosis is usually good but recurrences

affect about 30% of patients and quality of life can be extremely limited with severe physical restrictions and dependence on glucocorticoids.

There have been major advances in therapy since 2004 with the publication of the first multicentre randomised clinical trials, especially on the use of colchicine (commonly used to treat gout). This drug is now recommended as first line therapy for acute pericarditis as adjunct to aspirin or NSAIDs and in patients with a first episode or recurrent acute pericarditis. "This treatment should improve patients' response to aspirin or NSAIDs, increase remission rates and reduce the recurrence of pericarditis," said Professor Philippe Charron, Task Force Co-Chairperson.

The guidelines recommend that pregnancy in women with recurrent pericarditis should be planned during a phase of disease quiescence. Specific recommendations are given on which medications to use during pregnancy (before and after 20 weeks), and after delivery during breastfeeding. For example, aspirin is the first choice before 20 weeks but should be avoided after 20 weeks and during breastfeeding. Colchicine is considered contraindicated, even though no adverse events during pregnancy have been reported in women with familial Mediterranean fever treated with colchicine during pregnancy and breastfeeding.

Also new are specific diagnostic criteria for acute pericarditis which is now identified when patients exhibit two of the following: pericarditic chest pain, pericardial rubs, new widespread ST elevation or PR depression on an ECG, or pericardial effusion (new or worsening). Recurrent pericarditis is defined as recurrence of pericarditis after a documented first episode of acute pericarditis and a symptom-free interval of at least four to six weeks.

Novel diagnostic strategies are introduced for the triage of patients with

pericarditis and pericardial effusion. These allow the selection of high-risk patients for treatment and specify when and how additional diagnostic investigations should be performed. Multimodality imaging is now an essential part of diagnostic evaluation. Professor Adler said: "The combination of diagnostic criteria and strategies will help clinicians to clarify what condition a patient has and provide the most appropriate therapy."

Despite the emergence of a large amount of new data over the past ten years, further research is required in a number of areas including the pathophysiology and risk factors for recurrent pericarditis; how pericarditis can be prevented if colchicine is ineffective; and the aetiology, pathophysiology, and management of isolated pericardial effusion.

Professor Charron concluded: "The field of pericardial diseases has seen dramatic improvements since the previous guidelines were published. The first clinical trials have been performed and put management of these diseases on the road of evidence based medicine. Patients with pericardial diseases should now receive more accurate diagnosis and improved treatment."

More information: 2015 ESC Guidelines on the Diagnosis and Management of Pericardial Diseases. European Heart Journal. 2015. 10.1093/eurheartj/ehv318

ESC Guidelines on the ESC Website: www.escardio.org/Guidelines-&-… delines-list/listing

Guidelines on the diagnosis and management of pericardial diseases executive summary; The Task force on the diagnosis and management of pericardial diseases of the European Society of c=Cardiology. *European Heart Journal*. 2004;25(7):587-610.