

Update: Acute Coronary Syndromes

Acute Coronary Syndromes. New Diagnostic Strategies and Treatment



Síndromes coronarios agudos: nuevas estrategias de diagnóstico y tratamiento

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Within its continuing education program, *Revista Española de Cardiología* launches a new series of *Update* articles. In recent years, these series have dealt with a range of topics in cardiology.^{1–8} Now, we believe the time has come to update our knowledge of acute coronary syndromes (ACS). Recent changes in the field have led to the publication of new guidelines on both acute ST-segment elevation myocardial infarction and non-ST-segment elevation ACS.^{9–13}

The present *Update* deals with those issues that have changed most, or aroused most controversy, in ACS. In the first article, we review the epidemiological data that are currently most relevant and sketch a view of the future. In the diagnosis and prognosis of ACS, various biomarkers have been studied but none—except troponin—has been introduced into clinical practice. In another article, we will analyze the value of the different troponin biomarkers, along with their potential future applications. The invasive strategy in non-ST-segment elevation ACS will be discussed in another paper, at a time when an invasive strategy with possible drawbacks in some subgroups of patients—particularly those with lower levels of risk—is systematically used.

In Spain, regional primary angioplasty programs are being implemented but run into difficulties when faced with the problems of performing reperfusion within an adequate time window. In this context, we will study how to improve these programs and the potential role of fibrinolysis as a reperfusion strategy in acute myocardial infarction. Subsequently, we will look at the clinical reality of damage from reperfusion—much in evidence in experimental models but less so in clinical scenarios—and possible means of protecting the myocardium. New antithrombotic drugs have been introduced in the treatment of ACS. These drugs are more effective, but they are also more expensive and entail a greater bleeding risk. How to use these drugs safely and their cost-efficiency will be analyzed in another article.

Clinical practice guidelines generally report recommendations derived from major randomized trials. However, in the “real world”, we treat patients who would be excluded from these trials and yet we apply guideline recommendations to them. We will devote one article to ACS treatment in these “special” patients

represented by populations of advanced age and/or with comorbidities. There have been significant developments in imaging tests in recent years and their use in ACS will also be covered in this series. Finally, we will review current secondary prevention strategies and their future prospects.

We sincerely hope this new *Update* series will be of use to readers of *Revista Española de Cardiología* and will help improve our daily clinical practice with heart disease patients.

CONFLICTS OF INTEREST

None declared.

REFERENCES

- Alfonso F, Bermejo J, Segovia J. Enfermedades cardiovasculares en la mujer: ¿por qué ahora? *Rev Esp Cardiol.* 2006;59:259–63.
- Alfonso F, Segovia J, Heras M, Bermejo J. Patología arterial no coronaria: ¿de interés para el cardiólogo? *Rev Esp Cardiol.* 2007;60:179–83.
- Alfonso F, Segovia J, Heras M, Bermejo J. Prevención cardiovascular: ¿siempre demasiado tarde? *Rev Esp Cardiol.* 2008;61:291–8.
- Bermejo J, Heras M, Segovia J, Alfonso F. Medicina cardiovascular traslacional. Ahora o nunca *Rev Esp Cardiol.* 2009;62:66–8.
- Segovia J, Bermejo J, Alfonso F, Heras M. Corazón derecho y circulación pulmonar: ¿una circulación menor? *Rev Esp Cardiol.* 2010;63:77–80.
- Pérez de Isla L, Avanzas P, Bayes-Genis A, Sanchis J, Heras M. Enfermedades sistémicas y corazón: introducción. *Rev Esp Cardiol.* 2011;64:60–1.
- Bayes-Genis A, Avanzas P, Pérez de Isla L, Sanchis J, Heras M. Arritmias: introducción. *Rev Esp Cardiol.* 2012;65:91.
- Avanzas P, Bayes-Genis A, Pérez de Isla L, Sanchis J, Heras M. Innovación en cardiología: introducción. *Rev Esp Cardiol.* 2013;66:133.
- Thygesen K, Alpert JS, Jaffe AS, Simoons ML, Chaitman BR, White HD. Documento de consenso de expertos. Tercera definición universal del infarto de miocardio. *Rev Esp Cardiol.* 2013;66:132.e1–15.
- Steg G, James SK, Atar D, Badano LP, Blomstrom Lundqvist C, Borger MA, et al. Guía de práctica clínica de la ESC para el manejo del infarto agudo de miocardio en pacientes con elevación del segmento ST. *Rev Esp Cardiol.* 2013;66:53.e1–46.
- Hamm CW, Bassand JP, Agewall S, Bax J, Boersma E, Bueno H, et al. Guía de práctica clínica de la ESC para el manejo del síndrome coronario agudo en pacientes sin elevación persistente del segmento ST. *Rev Esp Cardiol.* 2012;65:173.e1–55.
- Anderson JL, Adams CD, Antman EM, Bridges CR, Califf RM, Casey Jr DE, et al. 2012 ACCF/AHA focused update incorporated into the ACCF/AHA 2007 guidelines for the management of patients with unstable angina/non-ST-elevation myocardial infarction: a report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines. *J Am Coll Cardiol.* 2013;61:e179–347.
- O’Gara PT, Kushner FG, Ascheim DD, Casey Jr DE, Chung MK, De Lemos JA, et al.; American College of Emergency Physicians; Society for Cardiovascular Angiography and Interventions. 2013 ACCF/AHA guideline for the management of ST-elevation myocardial infarction: a report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines. *J Am Coll Cardiol.* 2013;61:e78–140.

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