







Ottava Giornata della Ricerca della Svizzera Italiana Venerdì 9 marzo 2018

Modulo per la sottomissione abstract di ricerca CLINICA

Titolo (massimo 15 parole)

The definition of left bundle branch block influences the response to cardiac resynchronization therapy

Autori (cognome e iniziali, es: Grassi L.)

Caputo ML (a), van Stipdonk AMW(b), Illner A (a), D'Ambrosio G (a), Regoli F (a), Conte G (a), Moccetti T (a), Klersy C (c), Prinzen FW (d), Vernooy K (b), Auricchio A (a)

Affiliazioni (ospedale o istituto, servizio o reparto, indirizzo, es: Ospedale Regionale di Lugano, Servizio di angiologia, Lugano)

(a) Fondazione Cardiocentro Ticino, Lugano, Switzerland; (b) Department of Cardiology, Maastricht University Medical Center, Maastricht, the Netherlands; (c) Service of Biometry and Clinical Epidemiology, Fondazione IRCCS Policlinico San Matteo, Pavia, Italy; (d) Department of Physiology, Cardiovascular Research Institute Maastricht (CARIM), Maastricht University, Maastricht, The Netherlands

Testo (massimo **250 parole**, preferibilmente in italiano (accettato anche in inglese), suddiviso in Introduzione, *Metodi*, *Risultati*, *Conclusioni* e *Finanziamento*

Background CRT has been proven to achieve most benefit in patients with left bundle branch block morphology (LBBB). However, ECG criteria to define LBBB significantly differ from each other.

Objective of the study was to evaluate the impact of different ECG criteria for LBBB definition on survival, hospitalization for heart failure and reverse remodelling in patients who received cardiac resynchronization therapy (CRT).

Methods. Six different definitions were assessed in baseline ECGs of patients who received a CRT device: a QRS duration of ≥150 ms and LBBB according to AHA/ACC/HRS, ESC 2006, ESC 2009, ESC 2013, definition proposed by Strauss and colleagues.

Results. Only the ESC 2009 and 2013 and the Strauss criteria were associated with a significant reduction in cumulative probability for hospitalization for heart failure (HR 0.54 [0.34-0.85]; 0.55 [0.36-0.82] and 0.55 [0.38-0.82], respectively) and of the combined endpoint of hospitalization for heart failure and mortality (HR 0.60 [0.42-0.86], 0.61 [0.43-0.87] and 0.57 [0.40-0.80], respectively. Interestingly, these are the simplest definitions for LBBB.

Conclusions. This study shows that the strength of the association of LBBB to outcome in CRT depends on the ECG criteria used to define LBBB. The relatively simple ESC 2009 and 2013 and Strauss criteria are significantly associated to clinical endpoints in CRT.

Visto superiore (prego indicare Nome e Cognome del superiore)

Angelo Auricchio

