The implementation of primary Percutaneous Coronary Intervention services in Argentina: a real challenge

Implementación de servicios de angioplastia primaria en Argentina: un gran desafío

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The European Society of Cardiology (ESC) initiated the "Stent for Life" (SFL) initiative in 2008 in order to stimulate the implementation of the ESC guidelines for ST-segment elevation acute myocardial infarction (STEMI) – specifically the implementation of primary percutaneous coronary intervention (pPCI) as the most effective treatment method. I had the priviledge (together with William Wijns) to be involved in this initiative from the beginning, because the Czech Republic was the first country where pPCI became the first choice treatment recommended by the official treatment guidelines already in 2002 (ESC guidelines followed in 2003 and ACC/AHA guidelines in 2004). Between 2008 and 2011 pPCI implementation in Europe improved dramatically. (1, 2) SFL was approached by several cardiology societies from other continents and slowly reached outside Europe. Later the initiative was renamed to "Stent - Save a Life!" (SSL).

In this "issue" of the journal A. Candiello et al. present data from SSL Argentina. (3) A total of 3,041 STEMI patients underwent pPCI in 38 centers within two years. This provides the mean case load of 40 pPCIs per center per year. Such case load seems low from the European perspective, but the Argentinian cardiologists should be congratulated for developing this program in their country, which is (not only) geographically so much different from most European countries. Patient outcomes (7% in-hospital mortality) are similar to those European countries, where trully all STEMIs (including very elderly and/or resuscitated and/or shock patients) are enrolled in the registries. We can assume, that there are no differences between Argentina and Europe in the quality of hospital care in these PCI centers. However, as the authors properly state, the main problem in Argentina is the lack of "reperfusion culture". This is best reflected by the fact, that only 20% of patients arrived to PCI centers via emergency medical services (EMS), the number being far higher in Europe. Despite this limitation, the first medical contact-balloon time of 117 minutes is surprisingly short. This is difficult to understand; a possible explanation may be, that many of these patients developed their STEMI while being hospitalized for other conditions (e.g. unstable angina) or that most of these patients lived close to the hospital and presented by self-transportation (relatively low case load per center may support this explanation).

To achieve nationwide implementation of pPCI for STEMI in a country with such vast distances (North - to - South length of Argentina is 5000 kilometers), extremely crouded cities (e.g. Buenos Aires and its outskirts has 15 millions inhabitants, i.e. 1/3 of the entire country population) versus low density population in most southern and mountainous areas, will be a real challenge. To better understand: Argentina is approximately 8-times larger then Germany while having only half of German population. I am looking forward to see more date from SSL Argentina, providing an overall nationwide picture of STEMI treatment (e.g. including patients treated by thrombolysis or treated conservatively, without reperfusion). Until we have such data we can only conclude, that the level of care in the SSL participating centers is high.

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