Methods: In our institution, all the patients treated with Impella 2.5 as first line therapy for a cardiogenic shock consecutive to ACS were retrospectively included. The mortality at day 30, the hemodynamic efficacy and complications have been analyzed.

Results: From July 2008 to December 2012, 22 patients (*13 men, 58±11 years)* with cardiogenic shock (*LV Ejection Fraction 26±8%; SOFA 9.2±4; cardiac index (CI) 2.1±0.4L/min/m²*) were included (*12 cardiac arrest, 59% STEMI*).The Impella 2.5 device provided effective hemodynamic support (CI increased by 16%, lung and capillary pressures respectively reduced by 36% and 28%). Survival at day 30 was 59%, and it has been maintained up to 6 months. Factors associated with mortality were incomplete revascularization (*p<0.01*), age >70 years (*p=0.07*), a SOFA score ≥9 (*p =0.02*) and blood lactate >6.3 mmol/L (*p=0.07*) at implantation.

Conclusion: This couraging results in our single-center experience should be confirmed by a randomized controlled trial.

0222

Public access defibrillators location strategy in major urban aeras using geographic optimization, is there an optimal number?

Benjamin Dahan (1), Patricia Jabre (1), Renaud Misslin (2), Muriel Tafflet (1), Daniel Jost (3), Wulfran Bougouin (1), Florence Dumas (1), Bertrand Renaud (1), Eloi Marijon (1), Xavier Jouven (1)
(1) APHP – INSERM U970 Centre d'Expertise Mort Subite, Urgences SMUR, Paris, France – (2) Université de Rouen, Laboratoire MTG, UMR CNRS 6266 IDEES, EES, Rouen, France – (3) Brigade des Sapeurs Pompiers de Paris, Paris, France

Purpose: In major cities, optimal distribution of automatic external defibrillators (AED) has long been debated. International guidelines recommended placing AED where at least an out-of-hospital cardiac arrest (OHCA) occurs every 2 years. However, bystander awareness of AED location is often limited. The aim of the study was to determine a potential strategic AED placement policy.

Methods: We included all OHCA managed in Paris by Emergency Medical Services between 2000 and 2010. First, we worked on different scenarios of regular AED placement according to several deployment distances (from 200 meters to 2000 meters), then we analyzed median distance between these AED potential placements and included OHCA. Second, we identified different types of public facilities in Paris and we calculated the median distance according to each type of public facilities. We evaluated the number needed of AED in each case.

Results: Among the 4176 OHCA of presumed cardiac etiology, 1415 (34%) occurred out-of-home and 1355 were eventually geocoded (Figure). Median distances between OHCA and district councils (n=20), post offices (n=195), subway stations (n=302), bike sharing stations (n=957) and pharmacies (n=1466) were 1052, 324, 239, 137 and 142 meters respectively.

Conclusion: Increasing number of AED following a regular distribution on the territory decreases drastically the median distance between AED potential placement and OHCA until a certain number (350 AED for Paris). Additional AED placement benefit becomes less apparent. AED public facilities coverage strategy may help to optimize AED placement. The choice of the best public facility should be based on its number and repartition on the territory and its proximity to OHCA.

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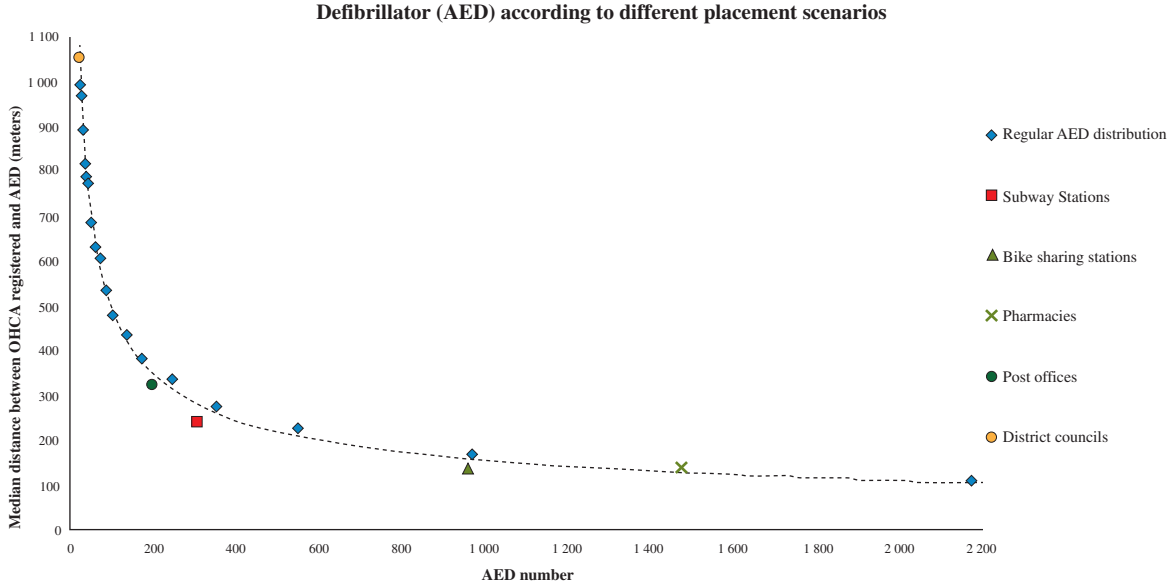
0036

Management of acute pericarditis in the emergency room. A real-life study in a tertiary care center in France

Julie Delon (1), Marc Pihan (1), Thomas Cautres (2), Emily Bennett (1), Thomas Brianchon-Campagne (1), Alexandre Chedaille (1), Cécile Coeffeteau (1), Emilie Valantin-Tissier (1), Dania Mohty (2), Christine Vallejo (1), Victor Aboyans (2)
(1) CHU Limoges, Urgences, Limoges, France – (2) CHU Limoges, Hôpital Dupuytren, Cardiologie, Limoges, France

Background: Few data on the management of acute pericarditis (AP) in emergency departments (ED) are available. We sought to describe the characteristics and outcomes of patients diagnosed for acute pericarditis (AP) in our ED in a tertiary care university hospital.

Median distance between Out of Hospital Cardiac Arrest (OHCA) and Automated External Defibrillator (AED) according to different placement scenarios



Abstract 0222 – Figure

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