

Impact of traffic conditions on time management of acute coronary syndrome with ST elevation myocardial infarction.



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Introduction :

Delays for taking over are the key determinants of the prognosis of acute coronary syndrome with ST elevation myocardial infarction (STEMI). Diverse criteria that can influence these deadlines were studied including the day of the week or the on-call period. The impact of the traffic conditions was not specifically studied. However, in highly-urbanized cities, such as a European capital, it could lengthen the response time.

Objective :

To assess the impact of the traffic conditions over the delay for STEMI management. The regional traffic data analysis identified two critical periods: from 8 to 9am and from 6 to 7pm (average speed < 60 km.h⁻¹) and calm periods from 1 to 2pm (average speed > 80 km.h⁻¹). Inclusion: primary care of patients with incoming call during one of these periods. The primary endpoint: delay between 112 call and first medical care/contact was considered as directly connected to traffic conditions. Statistics: data obtained were analyzed using Kruskal-Wallis test.

Results :

19.658 delays were analyzed from 2003 to 2014. The traffic conditions did not impact the delays.

The traffic conditions had no impacts on traffic delays. Obviously, the “urgent” traffic modalities allow overcoming traffic difficulties.

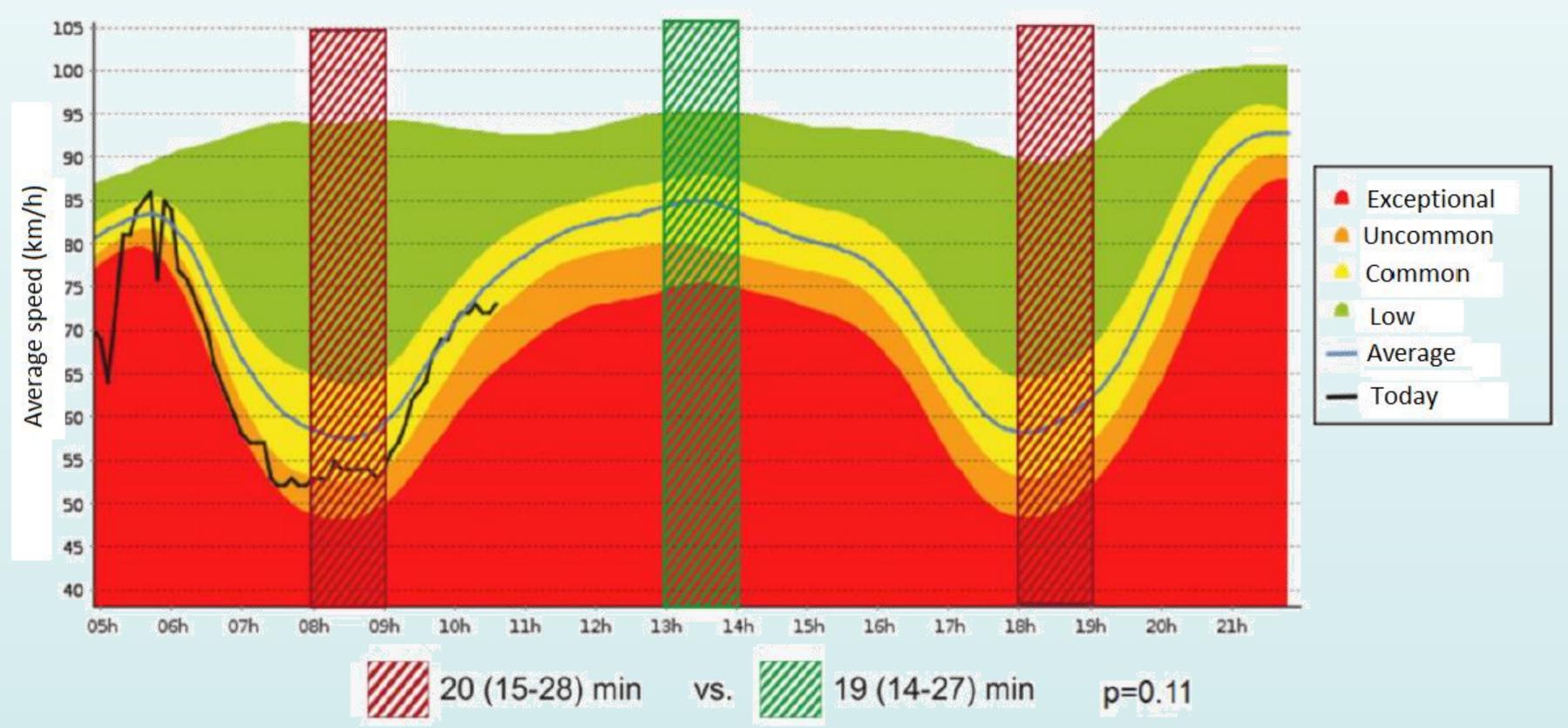


Figure 1 : Impact of traffic conditions on time management in highly-urbanized city : Comparison between critical periods (red, N=886) and calm period (green, N=1030)