» Abstract 83752

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Abstract Authors

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Abstract Content **86%**

AIM Acute myocardial infarction in elderly patients might show an atypical presentation, with symptoms other than chest or epigastric pain. A timely and correct diagnosis might thus be neglected or delayed with dramatic clinical and survival consequences in this setting of patients characterized by a higher incidence of adverse events.
METHODS 27841 patients from all over Apulia (19.362 Km², 4 millions inhabitants), referred since October 2004 until April 2006 to public emergency health care number "118" and underwent ECG evaluation. Data recorded were transmitted with a mobile telephone support to a telecardiology "hub" active 24-hours a day. Hospitalization or further examinations were disposed by emergency physicians on basis of ECG diagnosis and consultation.
RESULTS 39% of patients referred chest or epigastric pain, 26% loss of consciousness, 10% breathlessness, 7% palpitations. ST elevation acute myocardial infarction (STEMI) was diagnosed in 1.92% of patients enrolled. 65.54% of patients with STEMI were male, 47.44% were older than 70 years, 49.60% of patient older than 70 years were male. Mean age of male patients with STEMI was 64.64 ± 13.82 vs 74.76 ±12.82 for females ($p<0.001$), with a bimodal distribution for two genders. Among patients with STEMI <70 years old chest or epigastric pain was present in 88.81% of subjects while atypical presentation (breathlessness, loss of consciousness, palpitations, other symptoms) was detected in remaining 11.19% (10.81% for males vs 12.73% for females, p n.s.). Elderly patients (>70 years old) showed atypical presentation of STEMI in 32% of cases (34.92% for females vs 29.03% for males, p n.s.) ($p<0.001$ in comparison to younger patients). Rate of atypical misleading presentation of STEMI rose up from a 9.17% in the class of age 60-69 years to 25.56% in the class 70-79, to 35.24% in the class 80-89, and to 46.15% in the class >89 ($p<0.01$ in all cases) ; dramatic errors or delay of diagnosis were thus avoided thanks to an immediate home ECG in a significant number of patients.
CONCLUSIONS Telecardiology home ECG diagnosis could significantly help in avoiding errors and delay of STEMI diagnosis in elderly patients with an increased prevalence of atypical presentations.

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Abstract Content **58%**

AIM To assess feasibility and reliability of telecardiology technologies applied to a region-wide public emergency health care service.
METHODS 27841 patients from all over Apulia (19.362 Km², 4 millions inhabitants), referred since October 2004 until April 2006 to public emergency health care number "118" and underwent ECG evaluation according to a previously fixed inclusion protocol. Data recorded were transmitted with a mobile telephone support to a telecardiology "hub" active 24-hours a day. Hospitalization or further examinations were disposed by emergency physicians on basis of ECG diagnosis and consultation.
RESULTS 39% of patients referred chest pain (CP) or epigastric pain, 26% loss of consciousness, 10% breathlessness, 7% palpitations. Atrial fibrillation (AF) was diagnosed in 11.68% of patients, STEMI in 1.91%. Among patients with CP, ECG showed STEMI in only 3.84% of cases, theoretically eligible for fibrinolysis or primary PCI; patients with STEMI referred CP in 78.94% of cases. Among patients with palpitations, only 10.27% of subjects showed ECG signs of supra-ventricular tachycardia, 25.18% of AF; other subjects avoided further improper hospitalization.
CONCLUSIONS This first region wide leading experience shows feasibility and reliability of telecardiology applied to a public emergency health care service. Lower number of improper hospitalizations and shorter delay in diagnosis point out benefits yieldable applying telemedicine protocols also to large public emergency health care networks.

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