The Internet as a solution facilitating the identification of patients with a suspected acute myocardial infarct

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Abstract

The current steps for diagnosing heart disease are very time consuming, delaying the correct identification of the problem, therefore, delaying the right treatment. In this study we have developed an experimental method using e-mail in order to identify patients with "rule out myocardial" condition and reduce the time lag for thrombolysis or coronary angioplasty in this clinical setting. Three different locations linked to the Internet by ISDN lines were used. Each line was connected with a computer. A pager and a dedicated phone line were also used. The following steps were performed for each situation: filling out of a questionnaire, ECG recording, questionnaire mailing and ECG by e-mail as attachment, pager warning that an urgent cardiology consultation was requested, including the doctor and patient's phone number, time to open the message and reply by e-mail, phone call for additional comments. A total of 24 attempts of interactive communication were performed. In 22 of those, an answer was obtained in less than 30 minutes. Two failures were recorded. One was due to a delay in the pager message, which did not arrive within the first hour; the second was due to a computer break down. This report shows that it is possible to establish a fast communication between the out patient clinic and the hospital (less than 30 minutes in most cases) at a very low cost and in a simple manner.