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An Unusual Presentation of Acute Coronary Syndrome

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ABSTRACT

Acute coronary syndrome in elderly can manifest with a variety of atypical presentation and may be associated with other comorbid conditions. We present an atypical presentation of ACS in an elderly left handed female presenting with sudden onset of slurred speech preceded by dizziness and vomiting. After through clinical examination and investigation she was managed as a case of non ST elevation myocardial infarction and ischaemic stroke.

Key words: acute coronary syndrome, atypicalpresentation, ischaemic stroke

INTRODUCTION

Acute coronary syndrome (ACS) refers to a spectrum of clinical presentations ranging from those for ST-segment elevation myocardial infarction (STEMI) to presentations found in non-ST-segment elevation myocardial infarction (NSTEMI) or in unstable angina.[1] In terms of pathology, ACS is almost always associated with rupture of an atherosclerotic plaque and partial or complete thrombosis of the infarct-related artery.[1-3]

In some instances, however, stable coronary artery disease (CAD) may result in ACS in the absence of plaque rupture and thrombosis, when physiologic stress (eg, trauma, blood loss, anemia, infection, tachyarrhythmia) increases demands on the heart.[2-4]Here we present an atypical presentation of ACS.

CASE REPORT

A 66 years old left handed, non obese female patient , not a known case of hypertension or diabetes mellitus was brought to Manipal Teaching Hospital, Pokhara with sudden onset of slurring of speech, preceded immediately by dizziness and two episodes of vomiting at about 1 pm in the afternoon. There were no associated symptoms of chest pain, palpitation, diaphoresis or dyspnoea. Pulse rate was 52/ min, regular and blood pressure was 190/110 mmHg. Patient did not show any evidence of cardiac failure. No focal neurological deficit was present. CT scan of brain showed evidence of fresh infarct over right frontoparietal region and an old infarct in left basal ganglia. ECG showed symmetrical T wave inversion in several leads. Blood troponins were positive and CK MB was 28.5 U/L. The patient developed left bundle branch pattern in ECG on next day although she remained absolutely asymptomatic. Cardiac echodoppler showed LVEF: 62%, LA/LV dilatation with no thrombus. Apical septal hypokinesia was present. Mild mitral regurgitation and Aortic regurgitation was detected due to degenerative changes in mitral and aortic valve respectively. The patient was managed as a case of Non ST elevation myocardial infarction and ischaemic stroke with Aspirin, Clopidogrel, Atorvastatin, Amlodipine,Enalapril and other symptomatic and therapeutic measures. In the view of progressive ECG changes, low molecular weight heparin was added in the management since benefit appeared to overweigh a small but possible risk of haemorrhagic transformation of cerebral infarct.

The aim of the presentation of this case is to highlight the fact that Acute Coronary Syndrome in elderly

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patients may present with atypical features and painless myocardial infarction may remain undiagnosed unless clinically suspected. Associated comorbid conditions like hypertension, diabetes mellitus and cerebrovascular disease may cause diagnostic difficultie7s and pose therapeutic dilemma.

DISCUSSION

Insights from the global registry of acute coronary events reveal that acute coronary syndrome without chest pain has been an under diagnosed and under treated high risk group.[1] Elderly patients are more likely to be female, to have associated hypertension, diabetes mellitus and cerebrovascular accident.[2]Although the infarction may be painless, the clinical presentation is often not asymptomatic. Most common symptoms observed is acute dyspnoea. Other symptoms are diaphoresis, nausea, vomiting and presyncope/ syncope, exacerbation of heart failure.[2] Increased occurrence of non Q wave infarction has been observed in this group.[3]Headache as sole manifestation of acute myocardial infarction in elderly patients has been described.[4] Our patient was an elderly female, had hypertension as comorbidcondition and presented with cerebral infarction. ECG features in conjunction with troponins positivity and elevated CK MB were consistent with diagnosis of non ST elevation myocardial infarction which was further supported by apical septal hypokinesia on echocardiography. The patient subsequently developed features of left bundle branch block next day. An interesting feature of the case was the fact that the sole presenting feature was slurring of speech preceded by dizziness and vomiting. Myocardial infarction was not only painless but also not associated with any cardiovascular symptoms. There was no other focal neurological deficit. CT scan of brain confirmed the presence of fresh cerebral infarct in addition to an old one for which history of any neurological deficit was absent. Coexistence of a fresh cerebral infarct and acute non ST elevation myocardial infarction posed a therapeutic dilemma as well. In the view ofprogressive ECG changes, the decision to institute low molecular weight heparin therapy was made since its benefit appeared to overweigh a small risk of haemorrhagic transformation of cerebral infarct.

It is concluded that Acute Coronary Syndrome may be painless and can present with atypical manifestations. It may also be associated with other comorbid condtions which may mask its presence and a diagnosis of ACS may be missed in absence of strong clinical suspicion. Comorbid condition may also pose therapeutic difficulties in such cases.

REFERENCES

1. Brieger D, Eagle KA, Godman SG, Steg PG, Budazej A, Montalescot KW. Acute coronary syndromes without chest pain. CHEST. 2004;126:461-9.
2. Paul SD, O' Gara PT, Mahjoub ZA. Geriatric patients with acute myocardial infarction. Cardiac risk factors profiles, presentation, thrombolytics, coronary interventions and prognosis. Am Heart J. 1996;131:710-5.
3. Hong RA, Licht JD, Wei JY, Heller GV, Blaustein AS, Pasternak RC. Elevated CK-MB with normal total creatine kinase in suspected myocardial infarction: associated clinical findings and early prognosis. Am Heart J. 1986 Jun;111(6):1041-7.
4. Amendo MT, Brown BA, Kossow LB, Weinberg FM.Headache as the sole presentation of acute myocardial infarction in two elderly patients.Am J GeriatrCardiol. 2001 Mar-Apr;10(2):100-1.