

INTRODUCTION

Concurrent cardio-cerebral infarction (CCI)—the simultaneous occurrence of AMI and ischemic stroke—is a rare but critical emergency. It requires timely recognition and careful coordination to balance cardiac and cerebral interventions for optimal outcomes.

CASE REPORT

Mr. B, a 55-year-old smoker with no prior medical history, presented with presyncope following exertion, preceded by chest pain, diaphoresis, and dyspnea. He was alert (GCS 15), hypotensive (BP 85/41 mmHg), and bradycardic (HR 30 bpm). ECG showed inferior-posterior STEMI. IV atropine improved his heart rate however blood pressure remain hypotensive. IV noradrenaline was started for cardiogenic shock. He was thrombolysed with IV streptokinase (1.5 million units). Thirty minutes later, he developed aphasia, left hemiparesis, and decreased consciousness (GCS E3V1M5). CT brain showed no hemorrhage. A diagnosis of CCI—inferior STEMI with left MCA infarct (NIHSS 24)—was made. PCI and thrombectomy were deferred due to high bleeding risk. He was transferred for further care and managed medically with DAPT, statin, fondaparinux, and pantoprazole. He achieved full neurological recovery and was planned for outpatient angiography.

Keyword:

1. Cardio-cerebral infarction
2. STEMI and stroke

REFERENCES

DISCUSSION

Concurrent cardio-cerebral infarction (CCI) is rare (~0.009%) but associated with high mortality. Management is complex, requiring urgent, often conflicting interventions for both AMI and AIS. Proposed mechanisms include cardiogenic shock—induced cerebral hypoperfusion, cardioembolism from intracardiac thrombi, and neurogenic myocardial injury.

Initial priorities depend on clinical stability. In hemodynamic compromise, initiate vasopressors and support cardiac function. Thrombolysis for STEMI should be administered cautiously, with close neurological monitoring. New deficits warrant immediate cessation and neuroimaging. In stable patients, AIS thrombolysis with tenecteplase (0.25 mg/kg) may be considered. PCI and thrombectomy decisions must weigh bleeding risk, timing, and available resources. Multidisciplinary coordination and individualized treatment sequencing are key to minimizing morbidity and improving outcomes.

CONCLUSION

Concurrent cardio-cerebral infarction is a rare, high-stakes emergency requiring early recognition, clinical precision, and multidisciplinary coordination. Timely detection of neurological deterioration and flexible, risk-adapted management are essential to achieving favorable outcomes.

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