

Mehaničke komplikacije nakon akutnog infarkta miokarda – prikaz slučaja

Mechanical complications of acute myocardial infarction – case report

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KEYWORDS: acute myocardial infarction, pulmonary edema, papillary muscle rupture, diabetic ketoacidosis.

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Uvod: Mehaničke komplikacije nakon akutnog infarkta miokarda (septalni defekt, ruptura papilarnog mišića, ruptura slobodnog zida klijetke ili aneurizma) su rijetke i obično nastupaju unutar nekoliko dana. Sve zahtijevaju žurnu dijagnostiku i liječenje, obzirom da nerijetko uzrokuju hemodinamsku nestabilnost bolesnika te su životno ugrožavajuće.^{1,2}

Prikaz slučaja: 64-godišnja bolesnica, prethodno zdrava, hospitalizirana je zbog akutnog posterolateralnog infarkta miokarda. Prilikom inicijalnog pregleda bolesnica je hemodinamski stabilna, a registriran je tihi sistolički šum nad mitralnom valvulom te novootkrivena šećerna bolest (glukoza u krvi 29 mmol/L). U nastavku je učinjena hitna koronarografija kojom je utvrđena okluzija proksimalne lijeve cirkumfleksne arterije te je ugrađen jedan stent obložen lijekom. Nakon intervencije bolesnica postaje progresivno dispnoična uz kliničke znakove akutnog zastoja nad plućima, hipotenziju i sinus tahikardiju. Učinjen je orijentacijski transtorakalni ehokardiografski pregled uz krevet bolesnice, kojim je unatoč lošem echo prozoru verificirana značajna mitralna regurgitacija (MR) uz hiperdinamsku kontrakciju normalno velike lijeve klijetke, te ejekcijsku frakciju lijeve klijetke oko 60%. Zbog izrazito visokih vrijednosti glikemije s elementima dijabetičke ketoacidoze započeta je kontinuirana infuzija brzdjelujućeg inzulina. Uz pažljivu primjenu intravenskog diuretika i malih doza nitrata dolazi do postupne kliničke stabilizacije bolesnice. Iako se i sama dijabetička ketoacidoza opisuje kao jedan od potencijalnih uzroka nekardiogenog plućnog edema, ponovno je evaluirana MR. Učinjen je transezofagusni UZV srca kojim se prikazuje ruptura glave anterolateralnog papilarnog mišića s posljedičnom masivnom, vrlo ekscentričnom, akutnom MR uslijed «flaila» stražnjeg kuspisa (slike 1, 2 i 3). U nastavku je učinjena uspješna zamjena mitralnog zalistka mehaničkom protezom te je bolesnica nakon ukupno 14 dana otpuštena iz bolnice.

Introduction: In the first few days following acute myocardial infarction mechanical complications such as septal defects, papillary muscle rupture or dysfunction, cardiac free wall rupture or ventricular aneurysms may occur. Incidence of these complications is rather low yet they are all life-threatening and need prompt detection and management.^{1,2}

Case report: A 64-year-old healthy female was admitted due to acute posterolateral myocardial infarction. During the initial examination, the patient was hemodynamically stable, presenting with a holosystolic murmur heard best at the apex. Initial work up demonstrated newly discovered diabetes with high blood glucose levels (29 mmol/L). Urgent coronary angiography was performed revealing proximal left circumflex artery occlusion and drug eluting stent was put in place at the site. Following the intervention the patient became progressively dyspneic with signs of pulmonary edema, arterial hypotension and sinus tachycardia. Bedside transthoracic echocardiography was performed and despite the poor echo window significant mitral regurgitation (MR) with hyperdynamic left ventricular contraction and left ventricular ejection fraction of 60% was verified. Due to the extremely high values of blood glucose with elements of diabetic ketoacidosis, continuous perfusion of rapid-acting insulin was initiated. Careful titration of intravenous diuretics and nitrates gradually stabilized the hemodynamic status. Although diabetic ketoacidosis is described as a potential cause of noncardiac pulmonary edema, after stabilization was achieved, transesophageal echocardiography was performed. The study showed rupture of the anterolateral papillary muscle resulting in acute, massive and highly eccentric MR due to posterior leaflet "flail" (Figures 1, 2 and 3). Patient underwent urgent mitral mechanical valve replacement surgery and was discharged from the hospital after a total of 14 days.

