





Multisistemski inflamatorni sindrom adultne dobi i akutno zatajivanje srca: prikaz slučaja

Multisystem inflammatory syndrome in adult and acute heart failure: a case report

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Uvod: Tijekom 2020. godine više je autora izvještavao o pojavi multisistemskog inflamatornog sindroma kod djece (eng. *multisystem inflammatory syndrome in children – MIS-C*)¹⁻³, no stalnom progresijom pandemije povećava se broj prijavljenih slučajeva kod odraslih. Radi se o životnougrožavajućem stanju koje se javlja nekoliko tjedana nakon primarne infekcije teškim akutnim respiratornim sindromom koronavirus 2 (SARS-CoV-2), a koje nerijetko uključuje teško akutno zatajivanje srca. Ovim se radom prikazuju slučajevi multisistemskog inflamatornog sindroma adultne dobi (eng. *Multisystem inflammatory syndrome in adult – MIS-A*) kod dva muškarca zaprimljenih na Zavod za intenzivnu kardiološku skrb, aritmije i transplantacijsku kardiologiju, Kliničkog bolničkog centra Zagreb.

Prikaz slučaja: U oba slučaja radi se o mlađim muškim osobama, starosti 26 i 40 godina, koji u svojoj anamnezi imaju recentno preboljenu SARS-CoV-2 infekciju u veljači, odnosno ožujku 2021. godine uz blažu kliničku sliku koja nije zahtijevala hospitalizaciju i oksigenoterapiju. Anamneza mlađeg bolesnika opterećena je adipozitetom i od ranije poznatom arterijskom hipertenzijom, dok drugi bolesnik do sada nije teže bolovao. Oba se bolesnika hospitaliziraju putem hitnog prijema radi perzistentnog febriliteta, a inicijalne krvne pretrage ukazuju na značajno povišene upalne parametre, povišen feritin te povišene kardioselektivne enzime i biljeg srčanog popuštanja NT-proBNP. Kod 26-godišnjeg bolesnika je trećeg dana hospitalizacije došlo do naglog pogoršanja stanja uz razvoj bolova u prsima, tahidispneje i hipotenzije radi čega se u slici kardiogenog šoka uz potporu vazopresora i inotropa, premješta u koronarnu intenzivnu jedinicu tercijarnog centra⁴, dok se 40-godišnji bolesnik premješta po postavljanju sumnje na MIS-A. Od simptoma

Introduction: In 2020, several authors reported on the onset of multisystem inflammatory syndrome in children (MIS-C)¹⁻³, but the constant progression of the pandemic increases the number of reported cases in adults. It's a life-threatening condition that occurs a few weeks after primary infection with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), which often involves severe acute heart failure. We report about two cases of multisystem inflammatory syndrome in male adult (MIS-A) admitted to the Department of Intensive Cardiac Care, Arrhythmia and Transplantation Cardiology, University Hospital Centre Zagreb.

Case report: They are both younger males, ages 26 and 40, who recovered from SARS-CoV-2 infection in February and March 2021. Both had a mild clinical presentation that did not necessitate hospitalization or oxygen therapy. The younger patient's medical history was marked by adiposity and arterial hypertension, whereas the other patient had no significant medical history. Both patients are admitted to the emergency department due to persistent fever, and preliminary blood tests reveal elevated inflammatory markers, ferritin, cardio selective enzymes, and the heart failure marker NT-proBNP. The 26-year-old patient's condition rapidly deteriorated on the third day of hospitalization, with the development of chest pain, tachydyspnea, and hypotension. He was transferred to the tertiary center's coronary intensive unit due to the development of cardiogenic shock, which was supported by vasopressors and inotrope⁴, while the 40-year-old patient was moved due to suspected MIS-A. Both patients reported febrility (up to 39.5°C), dyspnea, reduced exercise tolerance, dry cough and diarrhea. The young patient reported chills and shivering, headache and nose secretions, while the other patient reported rashes on the forearms and distal part

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oba bolesnika prijavila su febrilitet (najviše do 39,5°C), dispneju, smanjeno podnošenje napora, suhi kašalj te proljevaste stolice. Za izdvojiti je još zimica, tresavica, glavobolja i sekrecija iz nosa kod mlađeg bolesnika te osip po podlakticama i distalnom dijelu natkoljenica bez svrbeža kod drugog bolesnika. Transtorakalnim ultrazvukom srca kod oba je bolesnika opisana teško reducirana globalna sistolička funkcija s istisnom frakcijom lijeve klijetke oko 20%, odnosno 30%. Po konzultaciji s infektologom pristupi se protokolu za liječenje MIS-A te se u oba bolesnika primijene dva ciklusa intravenjskih imunoglobulina uz kortikosteroide te antibiotsku terapiju. Postepeno je kod bolesnika uvedena terapija kroničnog srčanog popuštanja. Po primjeni navedene terapije dolazi do poboljšanja kliničkog i subjektivnog stanja bolesnika uz regresiju upalnih parametara i kardioselektivnih enzima. Učinjeni su i kontrolni transtorakalni ultrazvuk srca te magnetska rezonanca koji pokazuju potpuni oporavak funkcije lijeve klijetke uz istisnu frakciju 63% kod mlađeg bolesnika te 53% kod starijeg bolesnika. Bolesnici su otpušteni kući 16., odnosno 21. dana hospitalizacije dobrog općeg stanja.

Zaključak: Multisistemski inflamatorni sindrom adultne dobi rijetka je, ali po život opasna komplikacija bolesti COVID-19 te kao takva zahtijeva brzu dijagnozu, hemodinamsku potporu te specifično liječenje. Doba pandemije COVID-19 ukazalo je na važnost medicinskih sestara, ali i na potrebu kontinuirane edukacije. Sestrinska profesija brzo se razvija i ne obuhvaća isključivo njegu bolesnika, već se od medicinskih sestara traži da posjeduju znanja o visokosofisticiranim oblicima liječenja bolesnika praćenih primjenom različitih tehnoloških dostignuća i noviteta.

of the thighs without itching. Both patients had severely reduced global systolic function, with an left ventricular ejection fraction (LVEF) of about 20% and 30%, respectively. Following consultation with an infectious disease specialist, the protocol for the treatment of MIS-A was approached, and we began with two cycles of intravenous immunoglobulin, corticosteroids, and antibiotic therapy. Chronic heart failure therapy was gradually introduced into patients. Following the administration of this therapy, patients' clinical and subjective conditions improve, with regression of inflammatory markers and cardio selective enzymes. Control echocardiography and magnetic resonance imaging were also performed, revealing that the young patient had fully recovered left ventricular function, with LVEF of 63% and the other patient having LVEF 53%. Patients were discharged home in good general condition on the 16th and 21st days of their hospitalization.

Conclusion: Multisystem Inflammatory syndrome in adult is rare but life-threatening complication of COVID-19 and it requires rapid diagnosis, hemodynamic support and specific treatment. The COVID-19 pandemic has highlighted the importance of nurses, but also the need for continuous education. The COVID-19 pandemic has highlighted the value of nurses, as well as the need for ongoing education. The nursing profession is rapidly evolving and does not solely focus on patient care; but even so, nurses are required to have knowledge about highly sophisticated treatments for patients, as well as the use of various technological achievements and innovations.

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