

Zbrinjavanje bolesnika s infektivnim endokarditisom za vrijeme aktivne COVID-19 infekcije

Patient care with infective endocarditis during active COVID-19 infection

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Uvod: Infektivni endokarditis (IE) je potencijalno životno ugrožavajuće stanje koje zahtijeva žurnu dijagnozu i početak liječenja¹. Endokarditis srčanog zaliska udružen s COVID infekcijom predstavlja izazov, ne samo za liječnike, već i za medicinske sestre. S obzirom na novonastalu situaciju i provođenje epidemioloških mjera, zahtjevna sestrinska skrb u promijenjenim teškim uvjetima rada predstavljala je bitan faktor u liječenju bolesnika. Prikazujemo slučaj 36-godišnjeg bolesnika koji je u prosincu 2020. godine liječen u KB Dubrava zbog infektivnog endokarditisa kompliciranog COVID-19 infekcijom.

Prikaz slučaja: Bolesnik je u listopadu 2020. godine inicijalno hospitaliziran u Klinici za infektivne bolesti zbog pneumokokne pneumonije i meningitisa. Zbog razvoja respiratorne insuficijencije mehanički je ventiliran. Posljedično primjeni antibiotske terapije vankomicinom, dolazi do akutne bubrežne ozljede. Bubrežna funkcija se oporavlja nakon kratkog perioda hemodijalize. Tijekom boravka dolazi do razvoja kardiorespiratornog aresta te je uspješno provedena reanimacija. Transtorakalnom ehokardiografijom registrira se perivalvularni apsces aortne valvule bez vidljivih vegetacija. Nakon mjesec dana hospitalizacije dolazi do daljnjeg pogoršanja kliničkog stanja. Učinjeno je testiranje na korona virus (SARS-CoV-2) te je potvrđen pozitivan nalaz, uz razvoj bilateralne COVID-19 pneumonije s respiratornom insuficijencijom koja je zahtijevala terapiju kisikom i daljnju mehaničku ventilaciju. Zbog potrebe za daljnjom dijagnostikom, transezofagijskom ehokardiografijom, koji se mogao izvesti samo uz educirano osoblje i provođenje mjera za sprječavanje širenja virusa, bolesnik je premješten u Kliničku bolnicu Dubrava koja

Introduction: Infectious endocarditis (IE) is a potentially life-threatening condition that requires urgent diagnosis and treatment¹. Heart valve endocarditis associated with COVID infection presents a challenge, not only for physicians but for nurses as well. Considering the situation and implementation of new epidemiological measures, challenging nursing care in changed and difficult working conditions presented an important factor in the treatment of the patient. In this paper we will present a case of 36-year-old patient who was hospitalized in December 2020 in University Hospital Dubrava for infectious endocarditis complicated by COVID-19.

Case report: Patient was initially hospitalized in October 2020 at the University Hospital for Infectious Diseases for pneumococcal pneumonia and meningitis. Mechanical ventilation begins due to the development of respiratory insufficiency. Vancomycin antibiotic therapy consequently results in acute renal injury. Renal function recovers after a short period of hemodialysis. During the stay, cardiorespiratory arrest developed and resuscitation was successfully performed. Transthoracic echocardiography finds a perivalvular abscess of the aortic valve without a visible vegetation. After a month of hospitalization, there is a further deterioration of the clinical condition. Testing for coronavirus (SARS-CoV-2) was performed and a positive finding was confirmed, with the development of bilateral COVID-19 pneumonia with respiratory failure requiring oxygen therapy and further mechanical ventilation. Due to the need for further diagnosis, transeophageal ultrasound of the heart, which could be performed only by trained staff, and implementation of measures to prevent the spread of

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je postala središnja COVID bolnica za Republiku Hrvatsku. Učinjenim transezofagijskim ultrazvukom, uz pridržavanje svih propisanih mjera sigurnosti, nađe se apsces korijena aorte sa pseudoaneurizmom uz veliku mobilnu vegetaciju na aortnoj valvuli i masivna aortna regurgitacija te je potvrđena dijagnoza infektivnog endokarditisa. Verificiran je masivni bilateralni pleuralni izljev uz znakove akutnog respiracijskog distress sindroma (ARDS). Kod bolesnika je bila indicirana hitna operacija srca zbog liječenja endokarditisa aortne valvule. Uspješno je implantirana biološka aortna valvula, apsces korijena aorte je saniran te je ostatni defekt zatvoren perikardijalnom zakrpom. Postoperativni oporavak je protekao bez komplikacija. Kontrolnom ehokardiografijom evidentiraju se uredni hemodinamski parametri nad aortnom valvulom. Uz adekvatnu sestrijsku skrb i intenzivnu fizikalnu terapiju bolesnik se uspješno oporavio te je otpušten kući dvanaestog postoperativnog dana.

Zaključak: Pozitivan nalaz na korona virus doveo je do prolongacije postavljanja dijagnoze i liječenja infektivnog endokarditisa. Unatoč svim primijenjenim mjerama liječenja COVID infekcija je ubrzala progresiju simptoma IE dovodeći do srčanog urušaja. Bolesnikovo stanje je zahtijevalo hitnu kardiokiruršku operaciju koja je mogla biti izvedena jedino uz educirano medicinsko osoblje (liječnici, medicinske sestre, perfuzionisti, tehničari) te uz pridržavanje epidemioloških mjera u za to unaprijed predviđenim COVID bolnicama koje su mogle ispuniti zahtjevne uvjete.

the virus, the patient was transferred to University Hospital Dubrava which became the central COVID hospital for the Republic of Croatia. Transesophageal ultrasound, in compliance with all safety measures, found an aortic root abscess with pseudoaneurysm with large mobile vegetation on the aortic valve and massive aortic regurgitation, which confirmed the diagnosis of infectious endocarditis. Massive bilateral pleural effusion with signs of acute respiratory distress syndrome (ARDS) was verified. Emergency cardiac surgery was indicated for treatment of aortic valve endocarditis. A biological aortic valve was successfully implanted, the aortic root abscess was repaired and the remaining defect was closed with a pericardial patch. Postoperative recovery proceeded without complications. Control echocardiography records normal hemodynamic parameters over the aortic valve. With adequate nursing care and intensive physical therapy, the patient successfully recovered and was discharged home on the twelfth postoperative day.

Conclusion: A positive finding for coronavirus led to a prolongation of the diagnosis and treatment of infective endocarditis. Despite all treatment measures taken, COVID infection accelerated the progression of IE symptoms leading to cardiac arrest. The patient's condition required urgent cardiac surgery which could be performed only by trained medical staff (physicians, nurses, perfusionists, technicians) and with adherence to epidemiological measures in pre-planned COVID hospitals that could meet the demanding conditions.

LITERATURE

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