

**RISK FACTORS OF *CLOSTRIDIoidES DIFFICILE* INFECTION IN HOSPITAL:
A SEVEN YEARS PROSPECTIVE STUDY**

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Clostridioides difficile infection (CDI) is one of the most common healthcare-associated infections (HA) (1). The risk factors (RFs) for HA CDI in surgical and non-surgical patients are poorly investigated in countries with a limited resource healthcare system (2). The aim of the study was to investigate differences in RFs associated with HA CDI and their outcomes in surgical and non-surgical patients in Military Medical Academy (MMA). A prospective cohort study was conducted from 2011 to 2017 in MMA. Study including adult patients diagnosed with initial episode of HA CDI, while deaths within 30 days of CDI diagnosis and in-hospital mortality were also recorded. Patients hospitalized for any non-surgical illness, who developed initial HA CDI were assigned to non-surgical group, whereas those who developed initial HA CDI after surgical procedures were in surgical group. During 7-year period, from 553 patients undergoing in-hospital treatment and diagnosed with CDI, 268 (48.5%) and 285 (51.5%) were surgical and non-surgical patients, respectively. The variables associated to HA CDI in non-surgical patients were as follows: age \geq 65 years, use of proton pump inhibitors, chemotherapy and fluoroquinolones. The variables associated with HA CDI in surgical patients were: admission to Intensive Care Unit and use of second- and third-generation cephalosporins. There were significant differences between them in 30-day mortality (15.7% vs 25.6, $p=0.006$) and in-hospital mortality (19.8% vs 28.1%, $p=0.029$). Based on obtained results, including significant differences in mortality, it can be concluded that non-surgical patients were more endangered with HA CDI than surgical ones.

References

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2. Forrester JD, Cai LZ, Mbanje C, et al. *Clostridium difficile* infection in low and middle human development index countries: a systematic review. *Trop Med Int Health*. 2017;22(10):1223-1232.

FAKTORI RIZIKA ZA NASTANAK INFEKCIJE *CLOSTRIDIODES DIFFICILE* U BOLNICI: SEDMOGODIŠNJA PROSPEKTIVNA STUDIJA

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Infekcija *Clostridioides difficile* (CDI) je jedna od najčešćih bolničkih infekcija (1). Faktori rizika (FR) za CDI kod operisanih i neoperisanih pacijenata nisu dovoljno istraživani u zemljama u razvoju, koje imaju limitirana novčana sredstva u zdravstvu (2). Cilj rada je bio da se ispita koje su razlike u FR za razvoj CDI i koji su ishodi infekcijekod operisanih i neoperisanih pacijenata lečenih u Vojnomedicinskoj akademiji (VMA). Prospektivna kohortna studija je sprovedena od 2011. do 2017. godine u VMA. Studija je obuhvatila odrasle pacijente kod kojih je dijagnostifikovana CDI, kao i 30-dnevni mortalitet i intrahospitalni mortalitet. Pacijenti koji su primljeni u bolnicu, a nisu operisani i koji su imali potvrđenu CDI su bili u grupi neoperisanih pacijenata, dok su pacijenti u grupi operisanih bili pacijenti koji su dobili CDI nakon operacije u bolnici. Nakon 7 godina, zabeleženo je da su 553 pacijenta koji su lečeni u VMA dobili CDI, od čega je 268 (48,5%) u grupi operisanih pacijenata, a njih 285 (51,5%) je u grupi neoperisanih pacijenata. FR za razvoj CDI kod neoperisanih pacijenata su: starost pacijenata ≥ 65 godina, upotreba inhibitora protonske pumpe, hemioterapija i fluorohinoloni. FR za razvoj CDI kod operisanih pacijenata su: boravak u jedinici intenzivne terapije i upotreba cefalosporina 2. i 3. generacije. Zabeležena je statistički značajna razlika u 30-dnevnom mortalitetu (15,7% prema 25,6, $p=0,006$) i intrahospitalnom mortalitetu (19,8% prema 28,1%, $p=0,029$). Na osnovu dobijenih rezultata, uključujući i statističku značajnost u zabeleženom mortalitetu, zaključujemo da su CDI bile češće kod neoperisanih pacijenata u poređenju sa operisanima.

Literatura

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