DOI:

ZNAČAJ PRIMENE SKORING SISTEMA I BIOMARKERA ZAPALJENJA U PREDVIĐANJU DVANESTOMESEČNOG PREŽIVLJAVANJA BOLESNIKA SA AKUTNIM PANKREATITISOM

THE IMPORTANCE OF THE APPLICATION OF SCORING SYSTEMS AND INFLAMMATION BIOMARKERS IN PREDICTING TWELVE-MONTH SURVIVAL OF PATIENTS WITH ACUTE PANCREATITIS

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SAŽETAK

UVOD: Težak akutni pankreatitis je oboljenje praćeno visokim intrahospitalnim mortalitetom koji se kreće u rasponu od 15-35%. Međutim, u odnosu na intrahospitalni mortalitet, prema podacima iz literature,u periodu od 12 meseci nakon otpusta iz bolnice smrtnost je dvostruko veća(1,2)Kod bolesnika koji su preživeli težak obilk akutnog pankreatitisaona iznosi skoro 70%.
CILJ: Cilj našeg istraživanja je bio da utvrdimo faktore koji bi mogli da nam pomognu u predviđanju 12 – mesečnog preživljavanja bolesnika sa akutnim pankreatitisom.
METODOLOGIJA: Istraživanje je sprovedeno u KBC Bežaniska kosa i obuhvatilo je ukupno 50 bolesnika oba pola, starijih od 18 godina sa kliničkom slikom akutnog pankreatitisa. Za sve ispitanike su sakupljeni demografski, podaci o komorbiditetu, gojaznosti, eventualnom razvoju sepse /ili drugih komplikacija, dužini boravka u JIL i na mehaničkoj ventilaciji.Laboratorijski markeri (uključujući CRP i PCT) i skoring sistemi (BISAP, MEWS, Ranson iAPACHE II)praćeni su u više vremenskih tačaka (na prijemu, nakon 48h, 72h, 7 dana). Uticaj svih ovih faktora na dvanaestomesečno preživljavaje je procenjen pomoću Cox regresione analize.
REZULTATI: Od ukupno 50 ispitanika intrahospitalni mortalitet je iznosio 16% (8 bolesnika). Preostalih 42 bolesnika koji su doživeli otpust iz bolnice je praćeno u periodu od 12 meseci nakon hospitalizacije. Dvanaest meseci nakon otpusta iz bolnice preživela su 37 bolesnika, muškoga pola 19 i ženskoga 18. Kod 2 bolesnika uzrok AP je bio alkoholizam, kod 1 nepoznat uzrok a kod dvoje hiperlipidemija.Bolesnici koji su nakon 12 meseci imalismrtni ishodbili su u grupi od 46-55g i od 66-75g.
Značajni prediktori preživljavanja 12 meseci nakon otpusta iz bolnice bile su visoke vrednosti BISAP, MEWS, APACHE II skora kao i povišene vrednosti PCT i CRP izračunavane u različitim vremenskim tačkama. Prisustvo sepse (p-vrednost long-ranka-0,023, vreme preživljavanja 152.8 dana); gojaznost(p-vrednost long-ranka<0.001, vreme preživljavanja 107.9 dana);i teške forme AP(p-vrednost long-ranka-0,002, vreme preživljavanja 96.3 dana); je takođe uticalo na kraći životni vek ovih bolesnika.Vrednost MEWS skora merene u sve četiri tačke, APACHE IInultog dana i nakon 48 h kao i Ransom nakon 48h pokazale su dobru prediktivnu vrednost u predviđanju dugoročnog preživljavanja (<0.001).Od biomarkera zapaljenjaPCT meren nakon 48,72 h inakon 7d pokazali su dobru statističku značajnost u dugoročnom preživljavanju (<0.001).Starosna dob je bila nezavisni prediktor mortaliteta kod ovih bolesnika
ZAKLJUČAK: Starije životno doba, povišene vrednosti biomarkera zapaljenja, visoke vrednosti skoring sistema mogu biti korišćeni za predviđanje ishoda lečenja kako u ranoj fazi lečenja tako i u proceni dugoročnog preživljavanja.
KLJUČNE REČI: akutni pankreatitis, dugoročno preživljavanje, skoring sistemi, biomarkeri zapaljenja

ABSTRACT

THE IMPORTANCE OF THE APPLICATION OF SCORING SYSTEMS AND INFLAMMATION BIOMARKERS IN PREDICTING TWELVE-MONTH SURVIVAL OF PATIENTS WITH ACUTE PANCREATITIS
INTRODUCTION: Severe acute pancreatitis is a disease accompanied by high intrahospital mortality ranging from 15-35%. However, compared to intrahospital mortality, according to literature data, mortality is twice as high in the 12-month period after discharge from the hospital(1,2). In patients who have survived severe acute pancreatitis, it is almost 70%.
OBJECTIVE: The aim of our study was to determine factors that could help us predict 12-month survival of patients with acute pancreatitis.
METHODOLOGY: The study was conducted at the Clinical Hospital Bežaniska kosaand included a total of 50 patients of both sexes, older than 18 years with a clinical picture of acute pancreatitis. Demographic data, comorbidity, obesity, possible development of sepsis/or other complications, length of stay in the ICU and on mechanical ventilation were collected for all subjects. Laboratory markers (including CRP and PCT) and scoring systems (BISAP, MEWS, Ranson and APACHE II) were monitored at multiple time points (at admission, after 48h, 72h, 7 days). The impact of all these factors on 12-month survival was assessed using Cox regression analysis
RESULTS: Out of a total of 50 subjects, in-hospital mortality was 16% (8 patients). The remaining 42 patients who were discharged from the hospital were followed up for a period of 12 months after hospitalization. Twelve months after discharge from the hospital, 37 patients survived, 19 males and 18 females. In 2 patients, the cause of AP was alcoholism, in 1, an unknown cause, and in two, hyperlipidemia. Patients who died after 12 months were in the 46-55 and 66-75 age groups.
Significant predictors of survival 12 months after hospital discharge were high values of BISAP, MEWS, APACHE II score as well as elevated values of PCT and CRP calculated at different time points. Presence of sepsis (p-value long-rank-0.023, survival time 152.8 days); obesity (p-value long-rank<0.001, survival time 107.9 days); and severe forms of AP (p-value long-rank-0.002, survival time 96.3 days); also affected the shorter life expectancy of these patients. The value of the MEWS score measured at all four points, APACHE II on day zero and after 48 h as well as Ransom after 48 h showed a good predictive value in predicting long-term survival (<0.001). Of the inflammatory biomarkers, PCT measured after 48.72 h and after 7 d showed good statistical significance in long-term survival (<0.001). Age was an independent predictor of mortality in these patients
CONCLUSION: Older age, elevated values of inflammatory biomarkers, high values of the scoring system can be used to predict the outcome of treatment both in the early phase of treatment and in the assessment of long-term survival.
KEY WORDS: acute pancreatitis, long-term survival, scoring systems, inflammatory biomarkers