

## THE DIFFERENCE IN TIME UNTIL THE APPEARANCE OF RECIDIVE OR METASTASIS MANIFESTATION AT PATIENTS CURED AGAINST COLORECTAL CANCER DEPENDING ON THE POSITION IN THE LEFT OR RIGHT COLON

Darko Kotromanović<sup>1</sup>

<sup>1</sup>Clinical Medical Center Osijek, Josipa Huttlera 4, Osijek, Croatia  
kotromanovic93@gmail.com

### Abstract

**Introduction:** The purpose of the study was to determine the difference in time until the appearance of relapse or metastases in patients treated for colorectal cancer, depending on the location of the tumor in the left or right colon at the Oncology Clinic of Clinical Medical Centre Osijek between 2010 and 2012, including 2012.

**Methods:** Study includes respondents whose data were taken from medical archive at the Oncology Clinic of Clinical Medical Centre Osijek. The data on patients' deaths were taken from the Registry Office of the Republic of Croatia.

**Results:** The study included 272 patients, 160 (58.8%) men and 112 (41.2%) women. According to the location, left sided colon tumor was discovered in 211 (77.6%) patients and right-sided in 61 (22.4%). The median age of patients was 67 years. Right-sided colon tumors are considerably larger with median diameter of 6 cm, as well as the number of lymph nodes, with median number of 16 cm. Median of time until the appearance of the metastases is 20 months (interquartile range is from 8 to 29 months); marked time being shorter in right-sided colon tumors. Positive outcome of the treatment was achieved in 205 (75.4%) patients, with no significant difference in comparison to the colon cancer localization. By using Kaplan-Meier analysis of patients' survival rates, a total 5- year survival rate of 72% was achieved in right-sided colon tumor in comparison to 62% in patients with the left-sided colon tumor.

**Conclusion:** This study confirms that there is a difference in colorectal cancer according to its location. Patients with right-sided colorectal cancer are older, the carcinoma is larger, the time until the appearance of a relapse or a metastases is shorter and 5-year survival rate is lower.

**Keywords:** colorectal cancer, oncology, colon

## PROCJENA NUTRITIVNOG STATUSA OBOLJELIH OD RAKA DEBELOG CRIJEVA LIJEČENIH U ODJELU INTERNISTIČKE ONKOLOGIJE KLINIKE ZA TUMORE

Maja Kovač<sup>1</sup>, Petra Lepetić<sup>1</sup>, Robert Šeparović<sup>1</sup>

<sup>1</sup>Zavod za radioterapiju i internističku onkologiju Klinike za tumore,  
KBC Sestre milosrdnice Zagreb  
e-mail kovacmaja04@gmail.com

### Sažetak

**Uvod:** Pretilost, izražena indeksom tjelesne mase (BMI „body mass index“) većim od 30 kg/m<sup>2</sup>, utvrđeni je čimbenik rizika za razvoj raka debelog crijeva. Nenamjerni gubitak na tjelesnoj masi jedan je od simptoma raka debelog crijeva i neprepoznat može dovesti do kaheksije, povezane s lošijim ishodom sustavne antineoplastične terapije i lošijom kvalitetom života bolesnika.

**Cilj:** Cilj ovog rada je procijeniti nutritivni status oboljelih od raka debelog crijeva liječenih u Odjelu internističke onkologije Klinike za tumore služeći se upitnikom procjene nutritivnog rizika NRS 2002.

**Metode:** Retrospektivno smo analizirali nutritivni status 175 bolesnika koji su od svibnja 2016. do svibnja 2018. započeli sustavno antineoplastično liječenje raka debelog crijeva u Odjelu internističke onkologije Klinike za tumore. Nizak nutritivni rizik definiran je rezultatom 0-2, a visoki nutritivni rizik definiran je rezultatom 3 ili više. U analizu je bilo uključeno 106 muškaraca i 71 žena, prosječne životne dobi 62 godine.

**Rezultati:** Većina bolesnika koji su započeli sustavno liječenje raka debelog crijeva u analiziranom razdoblju bila je niskog nutritivnog rizika, 122 (70%) bolesnika. Visok nutritivni rizik opažen je u 53 (30%) bolesnika, u 11 (37%) bolesnika liječenih zbog ranog raka debelog crijeva i 42 (29%) bolesnika liječenih zbog proširenog raka debelog crijeva. Većina bolesnika bila je prekomjernog indeksa tjelesne mase (BMI > 25 kg/m<sup>2</sup>) i u toj skupini bolesnika,

visok nutritivni rizik opažen je u ¼ bolesnika (27 (26%) bolesnika).

**Zaključak:** Procjena nutritivnog statusa bolesnika oboljelih od raka debelog crijeva odgovarajućim alatima, trebala bi biti dio svakodnevne liječničke prakse kako bi se bolesnicima osigurala odgovarajuća potporna skrb te poboljšao ishod liječenja i preživljenje oboljelih od raka debelog crijeva.

## ASSESSMENT OF NUTRITIONAL STATUS OF PATIENTS THAT BEGAN SYSTEMIC THERAPY OF COLORECTAL CANCER AT THE UNIVERSITY HOSPITAL FOR TUMORS

Maja Kovač<sup>1</sup>, Petra Lepetić<sup>1</sup>, Robert Šeparović<sup>1</sup>

<sup>1</sup>Department of Radiotherapy and Medical Oncology, University Hospital for Tumors Zagreb, University Hospital Center Sestre Milosrdnice

### Abstract

**Introduction:** Obesity, measured by body mass index (BMI) of 30 kg/m<sup>2</sup> or more, is established risk factor for the development of colorectal cancer. Unintentional body weight loss is one of the symptoms of colorectal cancer and unrecognized may lead to cachexia, associated with a poor outcomes of systemic antineoplastic therapy and patients poor quality of life.

**Aim:** The aim of this paper is to evaluate nutritional status of patients that began systemic therapy of colorectal cancer at the Department of Oncology, University Hospital for Tumors using the nutritional screening tool NRS 2002.

**Methods:** Retrospectively we analysed nutritional status of 175 patients that began systemic therapy of colorectal cancer from May 2016 until May 2018. Low nutritional risk was defined as NRS 2002 score of 0-2 and high nutritional risk as NRS 2002 score of 3 or more. There were 106 men and 71 women, median age of 62 years.

**Results:** Majority of patients that began systemic therapy of colorectal cancer in analyzed period had low nutritional risk, 122 (70%) patients. High nutritional risk was observed in 53 (30%) patients, in 11 (37%) patients with early colorectal cancer and 42 (29%) patients with metastatic colorectal cancer. Majority of patients were overweight (BMI > 25 kg/m<sup>2</sup>) and in ¼ of these patients (27 (26%) patients) high nutritional risk was observed.

**Conclusion:** Assessment of nutritional status of colorectal cancer patients using appropriate nutritional screening tool should be implemented in medical practice in order to provide adequate supportive care and therefore improve therapeutic and survival outcomes of colorectal cancer patients.

## POČETNI ERITROPOETIČKI PARAMETRI KOJI PREDVIĐAJU POVEĆANJE RETIKULOCITA U NIŽOJ ILI UMJERENOJ VISINSKOJ AEROBNOJ AKTIVNOSTI

Matea Sedlaček<sup>1</sup>, Lana Ružić<sup>1</sup>

<sup>1</sup>Kineziološki fakultet, Horvačanski zavoj 15, Zagreb, Hrvatska  
matea.sedlacek@gmail.com

### Sažetak

**Uvod:** Visoka nadmorska visina i njen utjecaj na ljudski organizam je vrlo istraživano područje, a adaptacijski odgovori osoba su individualni. Utjecaj visine do 2000m nije toliko detaljno istraživano, iako je to uobičajena visina na kojima rekreativna populacija provodi svoj aktivan odmor te bi od tog odmora mogla možda imati neke koristi vezane uz krvnu sliku. I za sportaše i za rekreativce bi bilo od velikog značaja unaprijed znati da li će osoba odgovoriti s pozitivnim učincima boravka na visini kako se sredstva ne bi trošila nepotrebno. Stoga je Cilj ovog istraživanja bio procijeniti prediktivnu moć inicijalnih stanja feritina, eritrocita i eritropoetina na relativni porast retikulocita.

**Metode:** Eksperimentalna skupina (N=17) je boravila 10 dana na skijaškom odmoru. Spavali su na 1250m nadmorske visine i svaki dan provodili 5-6 sati aerobne aktivnosti (skijanje) na visini do 2000m. Izmjerene su inicijalne i finalne vrijednosti feritina, retikulocita, eritrocita i eritropoetina.

**Rezultati:** Model multiple regresije je mogao objasniti 27% promjene u retikulocitima (R=0,522; R<sup>2</sup>=0,273; Adjusted R<sup>2</sup>=0,105; F(3,13)=1,627; p<0,231; Std. Error of Estimate: 2,106), a između mjerenih prediktora pokazalo se da značajnu i najveću moć ima inicijalna koncentracija eritropoetina. Naime, inicijalno niža koncentracija eritropoetina je rezultirala većim relativnim porastom broja retikulocita (b\* = 0.65; Std. Err of b\* = 0.300; p<0.05). Inicijalne vrijednosti feritina nisu se pokazale kao dobar prediktor odgovora retikulocita, dok su inicijalne vrijed-