

## INTISARI

**Latar belakang:** Nutrisi merupakan bagian penting dalam manajemen pasien di unit perawatan intensif. Faktor nutrisi perlu diketahui apakah ada hubungan antara nutrisi dengan luaran ICU pada pasien *post* operasi kraniotomi di ICU.

**Tujuan:** Mengetahui hubungan fungsi absorpsi gastrointestinal pasien *post* operasi kraniotomi terhadap lama rawat inap dan mortalitas di ICU RSUP dr Sardjito

**Metode:** Digunakan rancangan observasional prospektif dengan desain *Cohort*. Besar sampel adalah 60 pasien dewasa yang dirawat di ICU RSUP Dr. Sardjito dengan usia  $\geq 18$  tahun, *post* operasi kraniotomi. Fungsi absorpsi dinilai dari parameter pemeriksaan gula darah sebelum dan sesudah pemberian nutrisi enteral. Dicari Hubungan fungsi absorpsi gastrointestinal dengan lama rawat inap dan mortalitas di ICU RSUP dr Sardjito Yogyakarta.

**Hasil :** Sampel pada penelitian ini sebanyak 60 pasien, jumlah pasien dengan gangguan kesadaran ringan GCS (13-15) 45 pasien (75%), gangguan kesadaran sedang (GCS 9-12) 6 pasien (10%), gangguan kesadaran berat (GCS 3-8) 9 pasien (15%) Rerata lama perawatan di ICU  $3,4 \pm 5,13$  hari. Cara keluar dari ICU terdapat 58 pasien (96,7%) hidup dan 2 pasien (3,3%) meninggal. Rerata skor NRS 2002  $3,2 \pm 0,4$ . rerata skor APACHE II  $6,53 \pm 4,7$ . 47 pasien (78,3%) dengan absorpsi baik dan 13 pasien (21,7%) buruk. Muntah 14 pasien (23,35), diare 6 pasien (10%), konstipasi 10 pasien (16,7%). Uji korelasi Spearman ada korelasi GCS dan skor APACHE II dengan lama rawat ( $p < 0,05$ ). Sedangkan usia, jenis kelamin, berat, tinggi dan IMT tidak bermakna ( $p > 0,05$ ). Variabel yang bermakna pada analisa multivariat adalah fungsi absorpsi gastrointestinal ( $p < 0,05$ ) koefisien regresi -9,3 artinya pasien dengan absorpsi buruk mengalami lama rawat 9,3 hari lebih lama dibandingkan pasien dengan absorpsi baik.

**Kesimpulan :** Terdapat hubungan bermakna fungsi absorpsi gastrointestinal terhadap lama rawat inap dan mortalitas, apabila fungsi absorpsi gastrointestinal baik maka lama rawat inap dan mortalitas menurun pada pasien *post* operasi kraniotomi di ICU RSUP DR. Sardjito Yogyakarta.

**Kata kunci :** Fungsi gastrointestinal, absorpsi, *post* operasi kraniotomi, ICU, NRS 2002, APACHE II.

## ABSTRACT

**Background:** *Nutrition is an important part of patient management in the intensive care unit. Nutritional factors need to be known, whether there is a relationship between nutrition and ICU outcome in post craniotomy surgery patient in ICU.*

**Objective:** *The aim of this study is to know the association between gastrointestinal absorption function with length of stay (LOS) and mortality in postoperative craniotomy patients in ICU RSUP dr Sardjito*

**Methods:** *Prospective cohort observational study design is used. The number of sample were 60 post craniotomy surgery patients older than 18 years old hospitalized in ICU RSUP Dr. Sardjito. The gastrointestinal absorption function is assessed from the parameters of blood sugar examination before and after the administration of enteral nutrition. The association of gastrointestinal absorption function is analyzed related to the LOS and mortality in ICU RSUP dr Sardjito Yogyakarta.*

**Result :** *There were 60 patients enrolled in this study. GCS values 13-15 was 45 patients (75%), GCS values 9-12 was 6 patients (10%), GCS values 3-8 was 9 patients (15%) The average LOS in the ICU was  $3.4 \pm 5.13$  days. The outcome were 58 patients (96.7%) survived and 2 patients (3.3%) died. The 2002 NRS average score was  $3.2 \pm 0.4$ , average APACHE II score was  $6.53 \pm 4.7$ . There were 47 patients (78,3%) with good absorption and 13 patients (21.7%) poor absorption. Vomiting ocure in 14 patients (23,35%), diarrhea 6 patients (10%), constipation 10 patients (16,7%). Spearman's correlation test showed a significant correlation of GCS and APACHE II score with LOS ( $p < 0.05$ ). While age, gender, weight, height and BMI were not significant ( $p > 0.05$ ). A significant variable in multivariate analysis was the gastrointestinal absorption function( $p < 0.05$ ) with regression coefficient of -9.3 means that patients with poor absorption experience 9.3 days longer duration of treatment than patients with good absorption.*

**Conclusion :** *There was a significant relationship between gastrointestinal absorption function and length of stay and mortality, If the gastrointestinal absorption function was good the length of stay and mortality was decreased in post craniotomy surgery patients in the ICU RSUP DR. Sardjito.*

**Keywords:** *Gastrointestinal function, absorption, post craniotomy surgery, ICU, NRS 2002, APACHE II.*