



Abstract

Background: Colorectal cancer is the third most common cancer worldwide. Along with the development of science and technology, life expectancy has also increased, but the number of geriatric patients suffering from colorectal cancer and undergoing surgery has also increased. Geriatric patients have many factors that can affect the patient's prognosis. Thus, a screening tool to predict the outcome of rectal cancer geriatric is needed.

Methods: An observational analytic study with a retrospective cohort study design. This research was conducted by taking medical record data and laboratory results of patients with rectal cancer who were treated at Dr. Sardjito General Hospital, Yogyakarta

Results: Patients with malnutrition, decreased levels of hemoglobin, albumin, and increased platelets affect mortality and postoperative complications of rectal cancer patients. In the analytical test, a significant association was found between the geriatric nutritional risk index (GNRI) and preoperative Hemoglobin, Albumin, Lymphocyte, and Platelet (HALP) score on mortality and postoperative complications in geriatric patients with rectal cancer. GNRI associated with length of stay in geriatric patients with rectal cancer. There is no relationship between HALP score preoperative on length of stay in geriatric patients with rectal cancer.

Conclusion: Both screening predictors of rectal cancer outcome, namely GNRI and HALP score, have a significant relationship with patient mortality and complications.

Keywords : Colorectal cancer, geriatric, GNRI, HALP score

Abstrak

Latar Belakang : Kanker kolorektal merupakan kanker urutan ketiga terbanyak di seluruh dunia. Seiring berkembangnya ilmu pengetahuan dan teknologi, usia harapan hidup ikut meningkat, namun jumlah pasien geriatri yang menderita kanker kolorektal dan dilakukan operasi juga meningkat. Pasien geriatri memiliki banyak faktor yang dapat mempengaruhi prognosis pasien. Maka diperlukan sebuah skrining sebagai prediktor *outcome* pasien kanker rektum geriatri.

Metode : Penelitian analitik observasional dengan desain penelitian kohort retrospektif. Penelitian ini dilakukan dengan mengambil data rekam medis dan hasil laboratorium pasien dengan kanker rektum geriatri yang dirawat di Rumah Sakit Umum Pusat dr. Sardjito, Yogyakarta.

Hasil : Pasien dengan malnutrisi, penurunan kadar hemoglobin, albumin dan peningkatan trombosit mempengaruhi mortalitas dan komplikasi pasca operasi pasien kanker rektum geriatri. Pada uji analisis didapatkan hubungan yang signifikan antara *geriatric nutritional risk index* (GNRI) dan *Hemoglobin, Albumin, Lymphocyte, and Platelet (HALP) score* pre operasi terhadap mortalitas dan komplikasi pasca operasi pada pasien kanker rektum geriatri. GNRI berhubungan dengan lama rawat pada pasien geriatri dengan kanker rektum. Tidak terdapat hubungan antara HALP *score* pre operasi terhadap lama rawat pada pasien kanker rektum geriatri.

Kesimpulan : Kedua skrining prediktor *outcome* kanker rektum yaitu GNRI dan HALP *score* memiliki hubungan yang signifikan terhadap angka kematian dan komplikasi pasca operasi.

Kata kunci : kanker kolorektal, geriatri, GNRI, HALP *score*