

## INTISARI

### **KADAR KOLINESTERASE YANG RENDAH SEBAGAI FAKTOR PREDIKTOR MORTALITAS PENDERITA KARSINOMA HEPATOSELULER**

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**Latar belakang.** Karsinoma hepatoseluler (KHS) merupakan masalah kesehatan dengan mortalitas yang cukup tinggi terutama di wilayah dengan distribusi virus hepatitis B dan C tinggi. Prognosis KHS sangat buruk, tergantung pada stadium dan cadangan fungsi hepar yang masih ada saat terdiagnosis. Disfungsi hati karena berkurangnya sintesis mengakibatkan penurunan kolinesterase (ChE) dan berhubungan erat dengan keparahan kerusakan sel-sel hati dan dapat menggambarkan fungsi cadangan hati penderita KHS.

**Tujuan Penelitian.** Mengetahui kadar ChE yang rendah sebagai faktor prediktor mortalitas 3 bulan (90 hari) pada penderita KHS.

**Metode.** Penelitian ini menggunakan desain kohort prospektif pada pasien yang telah tegak KHS dan dilakukan pemeriksaan kadar ChE serum. Dilakukan pengamatan selama 3 bulan (90 hari) dengan penilaian hasil akhir kejadian mortalitas.

**Hasil Penelitian.** Sebanyak 69 subyek penelitian yang dianalisis pada akhir penelitian, terdiri dari 30 subyek mengalami penurunan kadar ChE dan sebanyak 39 subyek dengan kadar ChE normal. Terdapat 73,3% subyek meninggal pada kelompok ChE yang rendah, berbeda bermakna dengan kelompok ChE normal yang hanya 38,5% mengalami mortalitas selama 3 bulan (90 hari). Analisis multivariat dengan regresi logistik pada penelitian ini menunjukkan jenis kelamin laki-laki dan kadar ChE yang rendah  $< 5,75$  U/ml berpengaruh secara bermakna terhadap mortalitas penderita KHS, masing-masing dengan  $p = 0,035$  dan  $p = 0,008$ . Penderita KHS dengan kadar ChE rendah memiliki peluang risiko mortalitas adalah 4,34 kali dibandingkan dengan yang tidak mengalami kadar ChE yang rendah.

**Kesimpulan.** Kadar ChE yang rendah  $< 5,75$  U/ml merupakan prediktor mortalitas 3 bulan (90 hari) pada penderita KHS.

**Kata kunci:** *karsinoma hepatoseluler, kolinesterase, mortalitas*

## ABSTRACT

### LOW CHOLINESTERASE LEVELS AS A PREDICTOR OF MORTALITY IN PATIENTS WITH HEPATOCELLULAR CARCINOMA

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**Background.** Hepatocellular carcinoma (HCC) is a health problem with high mortality in areas with high incidence of hepatitis B and C viruses. The prognosis of HCC is very poor, depending on the stage and reserve of liver function that is still present when diagnosed. Liver dysfunction due to reduced synthesis results in a decrease of cholinesterase (ChE) and is closely related to the severity of damage to liver cells and can describe the reserve function of the liver of HCC patients.

**Aim of Study.** To determine low ChE levels as a predictor of 3 months (90 days) mortality in HCC.

**Method.** This study used a prospective cohort design in HCC patients and serum ChE levels were examined. Observations were carried out for 3 months by assessing the final outcome of mortality.

**Result.** A total of 69 research subjects were analyzed at the end of the study, consisting of 30 subjects who had decreased ChE levels and as many as 39 subjects with normal ChE levels. There were 73.3% of subjects died in the low ChE group, significantly different from the normal ChE group, which only 38.5% experienced mortality for 3 months (90 days). Multivariate analysis with logistic regression in this study showed that male sex and a decreased in ChE levels < 5.75 U/ml significantly affected mortality of HCC patients, each with  $p = 0.035$  and  $p = 0.008$ . HCC patients with low ChE levels < 5,75 U/ml had a chance of mortality risk was 4.34 times compared with those without low ChE levels.

**Conclusion.** Low ChE levels < 5,75 U/ml were predictors of 3 months (90 days) mortality in HCC.

**Keywords:** *hepatocellular carcinoma, cholinesterase, mortality*