

Abstrak

PERBEDAAN KADAR CEA DAN CA 19-9 DALAM SERUM BERDASARKAN DIFFERENSIASI SEL PADA KANKER KOLOREKTAL

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Latar Belakang --- *Carcinoembryonic Antigen* (CEA) dan *Carbohydrate Antigen* (CA 19-9) adalah penanda tumor untuk kanker kolorektal (KKR). Keduanya memiliki nilai prognostik. Berdasarkan *Colorectal Working Group of the American Joint Committee on Cancer* dikatakan nilai abnormal bila peningkatan nilai CEA yaitu $\geq 5 \mu\text{g/l}$ dan peningkatan nilai CA 19-9 yaitu $\geq 37 \text{ U/ml}$. Peningkatan CEA dalam serum dapat diperiksa pada penderita KKR pasca operasi bila terdapat rekurensi atau metastasis, mungkin hal tersebut menyebabkan adanya pengaruh differensiasi sel dengan kadar CEA. Demikian CA 19-9 menurut rekomendasi ASCO, dapat melengkapi pemeriksaan pada penderita KKR. Belum ada data penelitian di Indonesia mengenai karakteristik kadar CEA dan CA 19-9 berdasarkan differensiasi sel penderita KKR preoperatif.

Tujuan --- Untuk mengetahui perbedaan kadar CEA dan CA 19-9 dalam serum berdasarkan differensiasi sel yang berbeda pada KKR.

Bahan dan Cara --- Sampel studi adalah pasien KKR ($n = 40$, rerata umur SD $54,67 \pm 14,96$, 22 pria, 18 wanita) antara Juli 2012 sampai dengan Mei 2013 diperiksa kadar serum CEA dan CA 19-9. Karakteristik klinikopatologis dan data dasar diperoleh secara *cross sectional* dengan analisis komparatif. Selanjutnya dianalisis perbedaan serta korelasi kadar CEA dan CA 19-9 berdasarkan differensiasi sel (derajat histopatologi).

Hasil --- Tidak dijumpai perbedaan bermakna kadar serum CEA dan CA 19-9 pada KKR berdasarkan differensiasi sel dengan *p value* 0,314 dan 0,787 ($p > 0,05$). Uji *Chi-square* dan *Spearman* didapatkan tidak dijumpai hubungan yang bermakna dari CEA dan CA 19-9 dengan differensiasi sel dengan *p value* 0,475 dan 0,247 ($p > 0,05$).

Kesimpulan --- Tidak dijumpai perbedaan yang bermakna secara statistik kadar CEA dan CA 19-9 pada KKR

Kata Kunci : Kanker Kolorektal, CEA, CA 19-9, Differensiasi Sel

Abstract

DIFFERENCE SERUM LEVEL OF CEA AND CA 19-9 BASED ON CELL DIFFERENTIATION IN COLORECTAL CANCER

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Background --- *Carcinoembryonic antigen* (CEA) and *Carbohydrate antigen* (CA 19-9) are the most common tumor markers for colorectal cancer. Both have prognostic value. According recommendation by the *Colorectal Working Group of the American Joint Committee on Cancer* (AJCC) CEA ≥ 5 ng/ml was defined as elevated CEA level and CA 19-9 ≥ 37 U/ml was defined as elevated CA 19-9 level. To date in Indonesia, data regarding serum level of CEA and CA 19-9 characteristic based on cell differentiation in preoperative colorectal cancer have not been available yet.

Objective --- To evaluate the difference of serum level CEA and CA 19-9 based on cell differentiation in colorectal cancer.

Materials and Methods --- The study was conducted from July 2012 to May 2013. Forty patients were enrolled in the study, 22 males and 18 females. The mean age of patients was 50.78 ± 14.96 years old, 22 males, 18 females. Clinicopathological characteristics and associated follow-up data were cross sectional with *comparative analytic*. Then to evaluate the difference and correlation serum level of CEA and CA 19-9 based on cell differentiation (*histopathologic grading*).

Result --- Serum level of CEA and CA 19-9 based on cell differentiation were not significantly different. There were no significant difference of CEA and CA 19-9 based on cell differentiation in colorectal cancer with p value 0.314 and 0.787 ($p > 0.05$) respectively. There was no correlation of CEA and CA 19-9 based on cell differentiation, p value 0.475 and 0.247 ($p > 0.05$) respectively.

Conclusion --- There was no significant difference of CEA and CA 19-9 based on cell differentiation in colorectal cancer.

Key Word : Colorectal Cancer, CEA, CA 19-9, Cell Differentiation

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