Perubahan kadar tumor nekrosis faktor alfa dan interleukin 6 pada penderita ikterus obstruktif akibat kanker pankreatobilier yang menjalani drainase bilier = Change of tumor necrosis factor alpha and interleukin 6 in obstructive jaundice caused by pancreaticbiliary cancer with undergoing biliary drainage

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Abstrak

Latar Belakang: Ikterus obstruktif merupakan salah satu komplikasi tersering keganasan sistem bilier. Keadaan ini akan memicu pelepasan sitokin proinflamasi. Terdapat kontroversi mengenai pengaruh drainase bilier terhadap perubahan kadar sitokin proinflamasi pada penderita kanker pankreatobilier.

Tujuan: Untuk mengetahui kadar Tumor Necrosis Faktor alfa (TNF-alfa) dan Interleukin 6 (IL6) sebelum dan sesudah Endoscopic Retrograde Cholangio Pancreatography (ERCP) atau Percutaneus Transhepatic Biliary Drainage (PTBD) pada penderita ikterus obstruksi etiologi kanker pankreatobilier.

Metode: Desain penelitian adalah one group before after study. Pemilihan sampel secara consecutive sampling. Sampel darah diambil sebelum dan lima hari sesudah ERCP atau PTBD. Pengukuran kadar TNF-alfa dan IL-6 dengan cara Enzyme Linked Immunosorbed Assay (ELISA).

Hasil: Terdapat 40 orang responden yang diikutsertakan dalam penelitian ini, 22 laki laki dan 18 perempuan dengan usia rata rata 55,3 tahun. Berdasarkan imaging dan endoskopi, ditegakkan diagnosis kolangiokarsinoma sebanyak 22 orang, tumor ampula Vateri 10 orang, dan tumor pankreas 8 orang. Kadar rata-rata TNF- alfa sebelum tindakan 4,81 (2,91) pg/ml dan sesudah tindakan 8,05 (6,7) pg/ml, terdapat peningkatan yang bermakna setelah tindakan drainase bilier (p:0,02). Kadar rata-rata IL-6 sebelum tindakan 7,79 (1,57) pg/ml dan sesudah tindakan 7,75 (1,76) pg/ml, tidak terdapat perbedaan yang bermakna setelah tindakan drainase bilier (p:0.52). Kadar rata-rata bilirubin sebelum tindakan 15,5 mg% dan sesudah tindakan 11,3 mg%.

Simpulan: Terjadi peningkatan kadar rata-rata TNF-alfa secara bermakna setelah drainase. Tidak ada penurunan yang bermakna kadar rata-rata IL-6.
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Background: Obstructive jaundice represents the most common complication of biliary tract malignancy. Obstructive jaundice causes releases of proinflammatory cytokine. There has been controversy about effect of biliary drainage on the change in proinflammatory cytokine level in pancreatobiliary cancer patients.

Objective: The present study was designed to determine levels of Tumor Necrosis Factor Alpha (TNF-Alpha) and Interleukin 6 (IL-6) in preprocedure of either Endoscopic Retrograde Cholangio Pancreatography (ERCP) or Percutaneus Transhepatic Biliary Drainage (PTBD) and postprocedure of them in obstructive jaundice patient caused by pancreatobiliary cancer.

Methods : The study method is before- and- after case study design with consecutive sampling. Blood was collected five days prior to either Endoscopic Retrograde Cholangio Pancreatography (ERCP) procedure or Percutaneus Transhepatic Biliary Drainage (PTBD) procedure and five days after either of them. Enzyme Linked Immunosorbed Assay (ELISA) was used to determine TNF-Alpha and IL-6.

Results: Forty subjects were included in this study which consisted of 22 men and 18 women. The mean age was 55.3 years old. According to the results of imaging and endoscopy procedure, twenty two (22) people were diagnosed cholangi carcinoma, ten (10) people were diagnosed ampulla varteri and eigth (8) people were diagnosed pancreatic tumor. In preprocedure, the mean of TNF-Alpha concentration was 4.81 (2.91) pg/mL, the mean of IL-6 concentration was 7.79 (1.57) pg/mL and the mean of bilirubin concentration was 15.5 mg%. In postprocedure, the mean of TNF-Alpha concentration was 8.05 (6.7) pg/mL, there was significant increase in TNF-Alpha concentration (p:0.02). However, the mean of IL-6 concentration was 7.75 (1.76) pg/mL, there was not any significant chance in IL-6 concentration (p:0.52). The mean of bilirubin concentration was 11.3 mg%.

Conclusions: On one hand, there was significant increase in mean concentration value of TNF-Alpha after biliary drainage procedure. On the other hand there was not any significant decrease in mean concentration value of IL-6 after biliary drainage procedure.