TITLE: SERUM LEVELS OF CYSTATIN C IN CHOLANGIOCARCINOMA

PATIENTS

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Introduction: Cystatin C (CysC), an endogenous non-glycosylated 13 kDa inhibitor of cysteine proteases that is constitutively expressed by all nucleated cells, plays a role in the regulation of cell proliferation, differentiation and migration. The aim of this study is to evaluate serum levels of cystatin C in cholangiocarcinoma patients compared with healthy group.

Methods: Serum Cys-C levels in a total of 130 patients (mean age- 61 years), who were diagnosed as cholangiocarcinoma from Cholangiocarcinoma Research Institute and 32 healthy samples from office of Medical Technology and Physical Therapy Health Service, Faculty of Associated Medical Sciences, Khon Kaen University were analyzed retrospectively. The serum Cys-C was deter­mined using latex enhanced immunoturbidimetric method.

Results: A significant higher level of serum cystatin C (1.93±1.2) was observed in CCA group than that of control group (1.1±0.59) (p=<0.000). Cholangiocarcinoma patients were significantly older than control group (p=0.000) but the age and serum cystatin C level were not associated in patients (p=0.871). A significant correlation coefficient was found between serum levels of Cys-C and those of Cre (P=0.032), but only poor agreement. However, no correlation was observed between Cys-C and survival days, Cys-C and spread by cancerous tumour (metastasis and no metastasis).

Conclusion: Thus, estimation of serum cystatin C levels may be important in cholangiocarcinoma patients.

Keywords: Cholangiocarcinoma CCA, cystatin C