**Introduction** Serum alkaline phosphatase levels in adults range between 20 and 120 U/L. When bone disease is excluded, an elevation suggests biliary obstruction, injury to the bile duct epithelium, or cholestasis.

The mechanism for an elevated alkaline phosphatase has been related to enhanced synthesis and to release from cell membranes by the detergent action of retained bile salts. When there is partial biliary obstruction, the alkaline phosphatase will be elevated but the patient may not itch and the serum bilirubin will be normal. In high-grade total biliary obstruction, jaundice and itching will also be present. However, the significance of an isolated mild elevation of alkaline phosphatase (less than 1.5 to 2 times the upper limits of normal) has undergone only limited investigation.

Only a few studies have investigated the significance of a mild, isolated elevation of alkaline phosphatase. Because 1% to 9% of people without symptoms have elevated liver enzymes, extensive evaluation of all abnormal test results would expose many patients to undue risks and expenses. On the other hand, failure to evaluate minor liver enzyme elevations could mean missing the early diagnosis of potentially treatable disorders. Keeping this in mind we decided to look at the ERCP findings in patients with raised alkaline phosphatase levels in patients with cholelithiasis but with normal CBD status on imaging.

**Methods** A retrospective descriptive study was conducted at Surgical Unit 4 of Civil Hospital Karachi, over a period of 5 yrs, from August 2006 to July 2012. Sixty five patients with altered LFT's in terms of raised alkaline phosphatase and bilirubin and normal biliary tract on imaging were included in the study. Informed consent was taken from all patients and permission from hospital ethical committee was sought. All patients underwent standard ERCPs. And the findings and clinical data were entered on the special ercp database. Results were analysed using spss version 19

**Results** A total of 65 patients were included in the study. Mean age of study population ranged from 9 to 90 years (mean age 46.5 years ± 14.94, median 45 years). Male to female ratio was 1:1.87. Pancreatitis was seen in 18 patients (36%). Malignant 15(3%), moderate in 1(0.2%) and severe in 2(0.4%). Mean amylase level at 4 hours and 24 hours was 280.93±539.13 and 168.83±538.34 respectively. Pancreatitis was seen in 15/326 (4.6%) female and 3/174 (1.72%) males. Statistically significant increased risk for pancreatic pancreatitis was seen in difficult cannulation (9.8%, p = 0.006), prolonged cannulation time (7.6min, p = 0.002), pancreatic duct cannulation (15.7%, p = 0.001) and pancreatic duct contrast injection (13.4%, p < 0.001).

**Conclusion** The frequency of pancreatitis was comparable to that of international literature. Difficult cannulation, pancreatic duct cannulation, pancreatic duct contrast injection and balloon sphincteroplasty increases the incidence of post ERCP pancreatitis. Reuse of ERCP accessories poses no additional risk to the frequency of pancreatitis.

**Disclosure of Interest** None Declared.