

Evaluation of opium effect on pancreatobiliary system in opium addicted patients by endoscopic ultrasonography

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Introduction: Pancreatobiliary abnormalities in patients with opium addiction have not been widely evaluated by endoscopic ultrasonography before.

Materials and Methods: Patients without any pancreatobiliary disease or symptom during 10 months were enrolled in this study. Common bile duct (CBD), pancreatic duct (PD) and portal vein (PV) diameters, gallbladder wall thickness and surface area of the papilla and abnormalities were evaluated in both groups by endosonography.

Results: In total, 199 patients were evaluated. 36 (18.1%) cases were addicted to opium. Mean age of the patients was 56.0 ± 14.2 years. Opium users had a statistically significant higher (all $P < 0.001$) mean diameters of distal CBD (4.6 ± 1.9 vs. 3.1 ± 1.0 mm), middle part of CBD (7.5 ± 3.1 vs. 4.6 ± 1.6 mm), PD in head (3.3 ± 1.3 vs. 2.3 ± 0.7 mm) and PV (10.3 ± 2.3 vs. 8.9 ± 2.1 mm). However, the difference in the diameters of PD in the body of pancreas and gallbladder wall thickness did not reach statistical significance. The size of the papilla as measured by the surface area of the papilla of Vater was also significantly larger in opium users (40.6 ± 17.1 vs. 29.9 ± 13.5 , $P < 0.001$).

Conclusion: Opium addicted persons have larger diameters of CBD, PV and a larger surface area of the papilla of Vater. Dilated PD only in the head of the pancreas might be an important clue to differentiate opium-induced CBD dilation from periampullary tumors and chronic pancreatitis. The clinical significance of these findings warrants further investigation.

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The authors declare: No significant relationship.