Comparative study of Endoscopic Retrograde Cholangiopancreatography Findings versus Magnetic Resonance Cholangiopancreatography in detection of lesions and anatomical variations of the biliary tree in patients with common bile duct dilatation

Thesis

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Abstract

Background: The growing prevalence and complexity of hepatobiliary surgery necessitate a detailed preoperative assessment of vascular and biliary anatomies for patient's safety and proper selection of a therapeutic approach. We can recognize biliary anatomy and pathologies by using ERCP, intraoperative cholangiography, CT cholangiography and/or MRCP

Aim of the work: To compare ERCP Findings versus MRCP in detection of lesions and anatomical variations of the biliary tree in patients with CBD dilatation by abdominal US.

Methods: The study was a prospective descriptive comparative study that included fifty patients submitted to ERCP in Fayoum University Hospital from February 2020 to september 2021

Results: According to Huang classification, type A1 is found in 36% (n=18), type A2 in 28% (n=14), type A3 in 24% (n=12), type A4 in 8%(n=4) and A5 in 4% (n-2) with no statistical differences between MRCP and ERCP in detection of variations. The sensitivity of MRCP in detection of stones, strictures and masses is 85.19%, 62.96% and 100% respectively while specificity is 95.65%, 100% and 100% respectively in comparison with ERCP.

Conclusions: Type A1 variant by Huang classification is the commonest anatomical finding. MRCP is a sensitive and specific modality in detecting biliary anatomical variations and different CBD pathologies except in biliary strictures where it is less sensitive which is of significant value (P value <0.001).