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**UTILITY OF INTRAOPERATIVE ULTRASONOGRAPHY IN MAJOR ABDOMINAL SURGERIES IS IT REALLY USEFUL ?**

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**OBJECTIVES**

- 1) To assess utility of Intraoperative ultrasound in major abdominal surgeries.
- 2) To assess if use of intraoperative ultrasound can assist in abdominal surgeries.
- 3) To develop a simple management protocol for investing patients undergoing any abdominal surgeries with a view to pick up lesions not detected on preoperative investigations.

**METHODOLOGY**

Patients who underwent major abdominal surgeries were initially subjected to a thorough history taking and clinical examination followed by preoperative workup which included routine imaging like X-ray and USG and advanced imaging like CECT, MRI, MRCP and ERCP. These patients then were assessed on the operation table by IOUS for confirming the preoperative findings and picking up any additional findings. Findings were meticulously tabulated in a chart. IOUS findings were also recorded and if they changed the surgical plan, then the same were also recorded.

**RESULTS and CONCLUSION**

A total of 144 patients have been included in study 73 with benign abdominal pathology and 71 with malignant abdominal pathology. Study shows that :

- 1) Based on this clinical diagnosis, radiological evaluation is undertaken to confirm the diagnosis, stage the disease in cases of malignancies and to decide the surgical plan. These investigations are USG, CECT, MRI & MRCP and ERCP which together have an accuracy of 85%-95%.
- 2) In patients of chronic pancreatitis, IOUS helps in identifying and locating the main pancreatic duct (MPD) prior to performing a lateral pancreaticojejunostomy(LPJ)
- 3) In patients of portal hypertension, IOUS helps to identify and locate the splenic artery from within the leash of collaterals at the pancreatic tail/upper border of pancreas. It also helps in locating the left renal vein in the retroperitoneum. In addition to this IOUS also helps to demonstrate and confirm preop patency of lieno-renal shunt.

- 4) In patients of cholelithiasis with choledocholithiasis, IOUS helps to determine CBD clearance in addition to other modalities already present to confirm the same.
- 5) In patients of abdominal malignancies IOUS appears to be useful tool to detect loco-regional spread and liver metastasis and also to guide the surgeon in performing the planned surgery.
- 6) The usefulness of IOUS in malignancies of hollow viscous appears to be limited.
- 7) It is recommended that an IOUS and Doppler machine be available in GI surgery units for use in the OT to assist in major surgeries.