

It is the most commonly indicated treatment for treating malignant tumors, however, it can be also used for benign entities as well including biliary stricture, chronic pancreatitis, choledochal cyst, inflammatory pseudotumour, and duodenal angiodysplasia.

Methods/Case Report: We report a case of a 50-year-old man who presented with symptoms of gastric outlet obstruction. Esophagogastroduodenoscopy and CT scan showed an obstruction at the level of the second part of the duodenum with proximal dilation. Subsequently, a Whipple procedure was performed based on high clinical suspicion of duodenal cancer. Gross examination revealed a unilocular thick walled cyst (4.2 cm) in the duodenum. Histopathologic examination showed a cyst lined by duodenal mucosa with thick smooth muscle wall and focal ectopic gastric tissue. This was finally diagnosed as a duodenal cyst consistent with duplication cyst.

Results (if a Case Study enter NA): NA

Conclusion: Duplication cysts are rare congenital abnormality predominantly diagnosed in infancy and childhood. They are most commonly located in the distal ileum, followed by the esophagus and ileocecal region, and are extremely rare in duodenum. Differential diagnosis includes choledochoceles, pancreatic pseudocyst, and cystic tumors of the pancreas, mesenteric cysts, and duodenal diverticula. Treatment options include total excision, cystojejunostomy, and endoscopic marsupialization but occasionally may lead to more invasive measures such as the Whipple procedure. Although duodenal duplication cysts can have variable clinical presentation and radiological findings, making preoperative diagnosis very challenging, it is still pertinent to be aware of this entity for the optimal patient care.

Neuroendocrine tumors and Survival- a meta-analysis

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Introduction/Objective: Neuroendocrine tumors (NET) are a rare group of epithelial neoplasm present in gastrointestinal tract (GI) (67.5%), bronchopulmonary tree (25.3-30%) and in 15% cases primary sites cannot be identified. Although endoscopic screening, improvement in pathological techniques and early detection have shown improvement in NET survival rates, the prognosis is very poor. In this study we aimed to evaluate the effect of Gastrointestinal pancreatic NETs (GEP NETs) grade on overall survival.

Methods/Case Report: We searched observational studies describing the overall survival or prognostic factors of primary GEP NETs from May 2011 -May 2021 following PRISMA guidelines. Studies describing the effect of primary grade 3 GEP NETs on overall survival were included. Meta-analysis was performed and pooled hazard ratio and their 95% confidence interval (95%CI) were obtained. The forest plots were created using random effects models and sensitivity analysis was performed to account for the heterogeneity.

Results (if a Case Study enter NA): Seven studies with 7692 confirmed patients were included. In our meta-analysis grade 3 GEP NET were associated with higher odds of poor survival (pooled HR: 2.73; 95% CI: 1.36–5.47; p = 0.005), with 92% heterogeneity between studies (p < 0.0001). To account for heterogeneity, sensitivity analysis was performed by removing two outlying studies (Fathi et al. and Foubert et al.) on funnel plots. The results after sensitivity analysis did not change and still showed significant association of grade 3 with poor survival (pooled HR: 4.53; 95% CI: 3.54–5.78; p < 0.00001), with no heterogeneity between studies (p = 0.72; I² = 0%).

Conclusion: Our meta-analysis found that grade 3 GEP NETs is associated with poor survival and additional future studies are needed to identify other risk factors associated with poor survival in GEP NETs to improve the mortality.

Histopathological Findings in the Gastrointestinal Tract of Patients with COVID-19

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Introduction/Objective: Amidst the SARS-CoV-2 pandemic, we have learned that other organs, aside from the

lungs, are affected by the virus. Tissue damage has been documented both clinically and histologically in multiple systems including the gastrointestinal tract. Clinical symptoms of gastrointestinal distress may be correlated with histopathologic findings. Studies have shown direct infection of epithelial cells in the GI tract in patients with the disease. The objective of this study is to identify specific histologic alterations that are present in patients with COVID-19.

Methods/Case Report: At our institution, a retrospective analysis was conducted to evaluate all COVID-positive patients who underwent any gastrointestinal procedure within 30 days after their positive test. The time frame included January 1, 2020 to December 31, 2020. Chart reviews were performed to document radiographic studies, endoscopic findings, histopathologic analysis, and clinical symptoms.

Results (if a Case Study enter NA): A total of 26 patients met our criteria for inclusion in the study. The cohort consisted of 10 males and 16 females ranging in age from 13 to 78 years. Tissue was sent for histologic analysis in 19 of these individuals. Tubular adenomas (13), chronic gastritis (11), and prominent intestinal lymphoid aggregates (7) were the most common pathologic findings (Table 1).

Conclusion: These findings suggest that the histopathologic findings rendered from GI procedures of patients with COVID-19 may be non-specific and may not reveal any morphologic correlate to the clinical signs and symptoms. We propose that histopathological abnormalities identified from GI samples of SARS-CoV-2 positive patients must be correlated with clinical symptoms, endoscopic findings, and imaging when available.

Metastatic Neoplasms of the Large Bile Ducts- A Clinicopathological Study

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Introduction/Objective: Biliary strictures are often considered malignant until proven otherwise. While the majority of malignant biliary strictures represent a primary neoplasm, secondary involvement by metastasis also rarely occurs. Primary cholangiocarcinoma and metastatic disease have different treatment considerations and likely different prognoses. The aim of this study is to look at the clinico-pathological characteristics of metastatic neoplasms of the bile duct.

Methods/Case Report: We retrospectively searched the pathology archives for biliary biopsies between 1991-2020. Patients with primary biliary, gallbladder, pancreatic, ampullary and hepatic malignancies and all cases of lymphoma were excluded from the study. A total of 20 cases were included.

Results (if a Case Study enter NA): The median age of the patients was 63 years with a M:F ratio of 1.9:1. The biopsies were taken from the common bile duct (n=17), common hepatic duct (n=2) and left hepatic duct (n=1). 8 patients had synchronous and 12 had metachronous presentation. The overall median interval between the bile duct metastasis and primary was 18 months (Range: 0-100 months) for all patients and 33 months for metachronous cases. For 13 tumors, the primary site of origin was in the gastrointestinal tract (colon: 7; stomach: 4; anal canal: 1; gastro-esophageal junction: 1). Other primary sites included breast (3 cases), lung, endometrium and adrenal (1 each). One case presented with metastatic melanoma with an occult primary. Adenocarcinoma was the most common histological subtype seen in 17 cases. Other histological subtypes were squamous cell carcinoma, adrenocortical carcinoma and melanoma.

Conclusion: Secondary involvement of the bile duct by metastasis is rare. Most cases are metastasis from the luminal gastrointestinal tract, with colon being the most common primary site. They are more likely to have a metachronous presentation with rare instances of bile duct metastasis as the first presentation. Awareness of secondary involvement of the biliary tree by metastasis is important as they can have prognostic and therapeutic significance.

Utility of colon allograft biopsies in surveillance of patients with small intestinal transplantation – A systematic study of 129 biopsies

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Introduction/Objective: A segment of right colon is sometimes included with small intestinal allografts to preserve the ileocecal valve and maintain water reabsorption. We correlated pathological findings of colon allograft biopsies obtained during surveillance colonoscopies with clinical, endoscopic, and microbiologic findings.

Methods/Case Report: All colon allograft biopsies from surveillance colonoscopies over a 3-year period were reviewed for crypt apoptotic activity, cryptitis, lamina propria inflammation, ulceration, and crypt architectural distortion. Clinical and endoscopic findings, and positive cultures a week before and after the biopsies were recorded.

Results (if a Case Study enter NA): There were 129 colon biopsies from 29 patients; 98 were histologically normal, whereas 28 showed rare apoptoses (n=14), focal cryptitis (n=8), increased intraepithelial lymphocytes (n=2), moderate acute rejection (n=1), and crypt architectural