
PP1-033**Radical Resection and Enucleation in Chinese Adolescents with Pancreatic Tumors: A 15-Year Case Series**

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Background: Pancreatic tumors rarely occur in adolescents, and the appropriateness of radical resection for these patients remains controversial.

Methods: Medical records were retrospectively reviewed for patients younger than 19 years who underwent radical resection or limited resection (enucleation) between 2000 and 2015. Patient demographics, clinical characteristics, operative details, growth and survival were analyzed.

Results: During the study period, 11 adolescents (mean age, 16.18 years; standard deviation, 1.99; range, 15.0–18.0) underwent radical resection (n = 7) or enucleation (n = 4) to treat solid pseudopapillary tumors (n = 5), pancreatic neuroendocrine tumors (n = 4), pancreatic neuroendocrine cancer (n = 1), or pancreatic ductal adenocarcinoma (n = 1). None of the 7 patients who underwent radical resection experienced recurrence or serious complications, while 3 of 4 patients who underwent enucleation experienced recurrence ($P = 0.024$). Recurrence-free survival was significantly longer in patients who underwent radical resection, and this procedure did not appear to affect adolescent growth and development.

Conclusion: Radical resection may be safe and effective for adolescents with pancreatic tumors.

Keywords: Pancreatic tumor, Adolescent, Survival, Radical resection, Growth.

PP1-034**Contribution of Pancreatic Mesenchymal Cells to Regeneration of Pancreas after Photochemical Injury in an Animal Model**

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Background/Aims: There has been a report that numerous mesenchymal cells was observed in the regenerating human pancreatic tissue and then proved to be pancreatic stellate cells (PSC). The aim of our study is to clarify and strengthen the role of mesenchymal cells in the processes of the pancreas regeneration in an animal model.

Methods: We adopted previous our new animal model for photochemical-induced necrotizing pancreatitis.

Results: Shortly after induction of pancreatic necrosis by photochemical injury there was no viable tissue within the illuminated area. With the progression of regeneration, newly appearing components were observed and then replaced necrotic tissue gradually.

These components were consisted of mesenchymal cells, epithelial cells with tubular structures, and some regenerating acinar cells. Each portion of the component was different from each time period. At the early stage of the regeneration, mesenchymal cells occupied most of the illuminated area. These cells were stained with desmin and α -SMA, suggesting PSC. With the progression of regeneration, however, epithelial cells formed tubular complexes started to be observed at the periphery of the illuminated area and then replaced area of PSC progressively. They were initially appeared as spherical or cylindrical tubes of various sizes, and scattered separately or nested with surrounding PSC. The epithelial cells became more swallowed with abundant cytoplasm, looking like real acinar cells, over time. It seems that epithelial cells might be transformed into acinar cells during the process of regeneration. At the late stage of the regeneration, tubular complexes with some newly appearing acinar cells were represented at the most of the illuminated area. Finally the illuminated area was totally replaced by normal pancreatic tissue.

Conclusions: The results of this animal study suggest that PSC is a key cellular component and play a leading role in the process of pancreas regeneration.

Keywords: Pancreas, Regeneration, Pancreatic stellate cell.

PP1-035**Preoperative Splenic Embolisation for Left Sided Portal Hypertension**

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Aim: To make surgery in Lt sided portal hypertension safe.

Method: We present our experience of managing a patient of Lt. sided portal hypertension due pancreatic lesion compressing splenic vein, who underwent pre operative splenic artery embolization. A 23 year old lady presented with complaints of pain/dargging sensation in abd mainly on the Lt. side of abdomen, increased menstrual bleeding and with one episode of hemetemesis. On examination she was found to have massive splenomegaly up to umblicus. Blood investigations showed anemia and thrombocytopenia. Abdominal imaging showed a mid body pancreatic lesion approx. of 5 cm in size with massive splenomegaly and large collaterals in the region of hilum, GE junction and retro peritoneum. Upper G.I. Endoscopy showed large varices in lower esophagus. In view Lt sided portal hypertension in order to decrease the blood loss patient was first subjected to angioembolization of splenic artery. She underwent Distal pancreatectomy and splenectomy. During surgery the collaterals were collapsed and the entaire procedure could be completed with less than 100 ml of blood loss. Biopsy of the lesion showed Solid pseudo-papillary tumor of pancreas with congestive splenomegaly.

Result: Splenectomy is curative for Lt. sided portal hypertension. During the period of 2010–2015 we treated 6 cases of Lt. sided portal hypertension. Our avarage blood loss during these splenectomy is approx. 750 ml. Post angioembolisation patient's platelet counts also improved. We found pre operative splenic artery

embolization a useful adjunct to decrease intraoperative blood loss and improved platelet counts.

Conclusion: Pre operative splenic artery embolization is a useful adjunct in patients of portal hypertension to improve platelet counts and to decrease blood loss especially in cases where apart from splenectomy other procedure also needs to be done.

Keywords: Left sided portal hypertension, Angioembolization, Splenectomy.

PP1-036

The Arc of Buhler: Special Considerations When Performing Pancreaticoduodenectomy

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A 74-year-old female was diagnosed as having a carcinoma of the papilla of Vater. Preoperative computed tomography showed stenosis of the celiac trunk and an enlarged artery arising from the superior mesenteric artery (SMA) joining the root of the splenic artery. Since this artery communicated with the SMA and the celiac trunk, independently of the gastroduodenal and dorsal pancreatic arteries, it was considered to be the arc of Buhler (AOB). The arterial blood flow to the liver, spleen and stomach appeared to depend on the AOB, such that AOB preservation was considered to be essential. A subtotal stomach-preserving pancreaticoduodenectomy with preservation of the AOB was thus performed. Although AOB is a relatively infrequent type of arterial communication between the SMA and the celiac trunk, it needs to be preserved during pancreaticoduodenectomy when celiac trunk stenosis is present.

Keywords: Arc of buhler, Pancreaticoduodenectomy, Celiac trunk, Stenosis.

PP1-037

Gallstones Etiopathogenesis, Lith, Mucin Genes and Treatment

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Gallstone is one of the more common and relatively costly conditions of the gastrointestinal system. Most gallstone cases involve individuals younger than 60 years of age, with the individuals aged 60 years and above representing 9% of the cases. There are many risk factors for gallstones. Lith and Mucin genes are play important role for gallstones formation. Surgery is therapeutic way for gallstones cure. But in the future there will be probably used some drugs for prevention of gallstones.

Environmental factors account for 75% of gallstone formations. Genetic factors represent 25% of gallstone formations (ABCG8 Cholesterol transporter 11%; UGT1A1 Gilbert variant 6%). In gallstone cases, differences have also been found in miRNAs

and miRNA expression. The role of nuclear receptors in gallstone formation should be investigated. Synthetic FXR (Farnesoid X receptor) agonists will be probably used in treatment in the future.

In the future A) individualized therapies based on lithogenic structure B) genetic therapies based on ABCG8, ABCB4, ABCB11, UGT1A C) treatments targeting environmental factors, e.g. estrogen, enterohepatic bacteria etc. will be discussed in the future. Non-drug primary protection (weight loss, exercise, diet modification) in individuals at normal risk or protection with medication (UDCA, nuclear receptor ligands, statin-ezetimibe) in individuals with markedly higher risk or profilaktik cholecystectomy will also be possible discussed.

Keywords: Gallstones, Genes, New therapy.

PP1-038

Early versus Delay Initiation in Adjuvant Treatment for Pancreatic Cancer

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Background: Pancreatic ductal adenocarcinoma (PDAC) is a highly aggressive tumor with a tendency for early recurrence, even after curative resection. Although adjuvant treatment improves survival, it is not well described early initiation of adjuvant treatment shows better outcomes in patients with PDAC.

Methods: One hundred thirteen patients who underwent chemotherapy or chemoradiotherapy after curative resection of PDAC were enrolled retrospectively: 56 in early group and 57 in delay group according to the median value of the time to initiation treatment.

Results: The median time to start adjuvant treatment was 35 days (range, 20–83 days), and 71 patients underwent adjuvant treatment completely. The median overall survival was 39.1 vs. 21.1 months, and disease-free survival was 18.8 vs. 10.0 months in the early and delay groups, respectively ($p = 0.018$ and 0.034), during the median 20.3-month follow-up. Moreover, the patients who underwent early initiation of treatment tend to be higher survival rate than those who did not, although time to initiation of adjuvant treatment did not influence survival rate significantly, considering the completion of adjuvant treatment ($p = 0.129$ and $= 0.195$, respectively). On multivariate analysis, an incompleteness of treatment (hazard ratio [HR]: 4.536, 95% confidence interval [CI]: 2.570–8.005), delay initiation of treatment (HR: 2.042, 95% CI: 1.178–3.541), and positive angiolymphatic invasion (HR: 2.135, 95% CI: 1.143–3.988) were significantly associated with shorter overall survival.

Conclusions: We suggest that adjuvant treatment would be delivered earlier and completed for better outcomes in resected PDAC patients, if possible.

Keywords: Pancreatic cancer, Adjuvant treatment.