ePoster Session
Date: Sunday, November 5, 2017
Time: 6:30am - 7:00am
Monitor: 2
Room Location: Alhambra A

6:35am - 6:40am
P6. REDUCTION IN THE RATE AND SEVERITY OF CLINICALLY RELEVANT POSTOPERATIVE PANCREATIC FISTULA CAN BE ACHIEVED BY SELECTIVE USE OF PANCREATICOGASTROSTOMY IN PATIENTS WITH A “HIGH RISK” PANCREATIC REMNANT.
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Presenter: George Kazantsev MD

Background: Postoperative pancreatic fistula (POPF) continues to dominate the spectrum of complications of pancreaticoduodenectomy (PD) leading to prolonged hospital stay and increased rates of re-admission, re-operation, and mortality. POPF is much more likely to occur in patients with “high risk” pancreatic remnant characterized by a soft gland and non-dilated pancreatic duct. We hypothesize that selective use of pancreaticogastrostomy (PG) in patients with a “high risk” pancreatic remnant will lead to a decrease in the rate of POPF compared with a standard 2-layer pancreaticojejunostomy (PJ).

Methods: We conducted an IRB-approved retrospective review of all of PDs performed between 2009 and 2016, focusing on surgeon’s assessment of gland texture (soft vs. hard), and duct size (<3mm was considered small). The pancreatic remnant was classified as “high-risk” if at least one risk factor (soft gland or small duct) was present. The choice of anastomosis (PJ vs. PG) was up to the individual surgeon; PG was restricted to patients with a “high risk” remnant while PJ was performed in the settings of both high- and low-risk remnants.

Results: A total of 151 patients (pts) underwent PD for benign (25.8%) and malignant (74.2%) disease. PJ was performed in 97 pts (70 “low risk “, and 27 “high risk” ), while PG was completed in 54 (all “high risk”). There was no difference in the length of surgery, blood loss, mortality, morbidity (Clavien grade III and above), re-operation, re-admission, delayed gastric emptying and postoperative bleeding between groups. Clinically relevant POPF (per ISGPF definition) developed in 19 (12.5%) of the 151 pts; there was no difference in the rate of POPF between PJ (13/97, 13.4%) and PG groups (6/54, 11.1%). However, the majority of POPF after PJ occurred in patients with “high risk” remnant: 9/27, 33.3%, vs. 4/70, 5.7% for low risk remnant patients, p=0.001, vs. 6/54, 11.1% for PG group (all “high risk” patients), p=0.019. All 6 cases of POPF in PG group were grade B while 5 out 13 following PJ were Grade C, suggesting that leaks developing after PG tend to be less severe. On univariate analysis, soft gland texture, “high risk category,” unfavorable histology (any etiology other than PDAC or chronic pancreatitis) were associated with increased risk of POPF amongst PJ patients; duct size and intraoperative blood loss were not. On multivariate analysis, soft gland texture was the strongest independent predictor of POPF (OR=11.25, 95% CI 3.035-41.7, p<0.001); risk group and unfavorable histology appeared to be collinear with it.

Conclusion: We believe that PJ remains the procedure of choice for patients with a “low risk” pancreatic remnant as the rate of POPF is quite low and the surgeons are more experienced with this anastomosis. In patients with a “high risk” remnant, PG leads to a substantial reduction in the rate and severity of POPF compared to PJ and should be the preferred method of reconstruction in such cases.
6:45am - 6:50am

P8. VARIATION IN DRG MIGRATION RATES: A MARKER FOR PROCESS OF CARE EFFICIENCY IN COLECTOMY IN VALUE BASED PURCHASING

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Background: Diagnostic Related Group Migration (DRG Migration). In colectomy, migration from DRG 331 to 330 is driven only by the occurrence of post-admission comorbidities or complications (CCs) and consequently the postoperative care plan rather than patient baseline physiology. DRG migration in colectomy represents a near doubling of cost to the Centers for Medicare and Medicaid Services (CMS). This study aimed to assess the variation in DRG Migration across US hospitals and the impact this may have on cost to CMS, and hospital costs due to extended length of stay (LOS) and complication management.

Methods: We polled 5% of national Medicare data, to identify the subset of DRG 330 patients assigned only by post-admission CCs and compared that to the hospitals performance on DRG 331 (those with no CCs reported at all). For each hospital, the DRG Migration percentage was defined as the number of patients in DRG 330 divided by the sum of DRG 331 and DRG 330 patients. Hospitals were divided into low (0-33%), moderate (34-66%) and high (67-100%) migration categories. Descriptive statistics were used to evaluate variation in DRG Migration and its impact on cost and LOS.

Results: The study analysis included 7,824 patients from 571 hospitals. The DRG Migration rate ranged from 0% to 89%, consisting of 347 hospitals with low rates (0-33%), 203 hospitals with moderate rates (34-66%), and 21 hospitals with high rates (67-89%). DRG migration resulted in significant additional patient days (LOS 8.3 vs. 4.6 days) and hospital costs ($12,057 vs. $6,998). Hospitals with the highest DRG Migration rates had significantly higher cost to CMS compared to hospitals with moderate/low migration rates ($13,477 vs $11,778/$11,333). Interestingly the LOS was comparable for the patients who migrated to 330 across the groups (8.0 vs 8.3 vs 8.1 days).

Conclusion: The DRG Migration rates for colectomy vary greatly by hospital demonstrating significant variation in the efficiency of perioperative care plans. DRG Migration is associated with nearly doubled cost of stay and almost doubled hospital days. Assessment of DRG Migration provides a simple means of assessing process of care differences for CMS colectomy patients across US hospitals. These data have implications for prospective payment insurers as well as hospital quality improvement programs as the health care system moves to value-based payment policy.
Background: Adrenocortical carcinoma (ACC) is a rare and aggressive malignancy for which surgery is the mainstay of treatment and adjuvant radiation is infrequently employed. However, small, single-institution series suggest that adjuvant radiation may improve survival for some ACC patients.

Methods: All patients with non-metastatic ACC treated with either surgical resection alone or surgical resection followed by adjuvant radiation were identified in the 2004-2013 National Cancer Database. Patients with tumors <1cm were excluded to eliminate incidental ACC as well as patients that died within 30 days of surgery. This study determined factors associated with receipt of radiation and the impact of adjuvant radiation on survival.

Results: Of 1,197 patients, 173 (14%) received adjuvant radiation. Patient demographics were similar between the two groups, but those receiving radiation were more likely to have had positive margins following surgery (37 vs 15%; p<0.001) as well as receive concurrent chemotherapy (57 vs 29%; p<0.001). After adjustment for tumor and other treatment factors, only positive margins following surgery was associated with an increased likelihood of receiving adjuvant radiation (OR 3.13; CI 1.64-5.98; p<0.001). Radiation therapy did not confer a difference in median 1, 3, or 5-year overall survival (p=NS) in the general cohort, whereas higher grade histology (HR 4.61; CI 1.55-13.7, p=0.01), positive margins (HR 1.74; CI 1.02-2.96, p=0.04), and vascular invasion (HR 1.77; CI 1.11-2.84, p=0.02) independently decreased survival. However, for patients with positive margins following surgery, adjuvant radiation was associated with a 35% decreased yearly risk of death (HR 0.65; CI 0.43-0.97; p=0.03). This survival advantage was not evident for patients with other traditional high risk features such as age >55, positive lymph nodes or high grade histology.

Conclusion: Adjuvant radiation appears to decrease the risk of death in ACC patients with positive margins following surgical resection, but only a small percentage are currently receiving radiation. Multidisciplinary treatment with surgery and radiation should be strongly considered for these patients.