PT164: Enhanced Recovery after Surgery (ERAS) for Pancreatectomy: Increased Intraoperative Vasopressor Use Does Not Increase Pancreatic Fistula Rates
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**Background**
- ERAS pathways have been increasingly implemented for various surgical procedures, including pancreatic surgery
- Goal- Directed Fluid Therapy (GDFT) is an essential component of many ERAS pathways
- GDFT selectively limits volume administration and is associated with increased vasopressor use
- Various reports suggest that vasopressor use is associated with increased anastomotic failure
- The true effects of vasopressor use on surgical outcomes, and pancreatic fistula rates are inadequately defined in the literature

**Methods**
- Instituted a prospective, funded IRB approved quality initiative of pancreatic ERAS pathway in July 2014
- Retrospective chart review of pancreatectomy from January 2013 to February 2016, before and after ERAS implementation
- Charts reviewed for demographics, comorbidities, intraoperative vasopressor use, and pancreatic fistula as defined by International Study Group of Pancreatic Surgery (ISGPs)
- Binomial regression, weighted by stabilized inverse probability-of-treatment weights, was used to estimate the effects of ERAS and intraoperative vasopressors on the risk of pancreatic leaks

**Results**
- 133 total patients: 58 Pre-ERAS, 75 ERAS
- Significant increase in patients requiring vasopressor infusion in ERAS cohort
  - 57.3% vs. 37.9%, p=0.04
- Significant increase in median proportion of OR time on vasopressors in ERAS cohort
  - 27% vs. 0.0%, p=0.02
- Incidence of clinically significant leaks was 14.3%, and was not significantly different between the cohorts
- Readmissions and length of stay was not significantly different between the cohorts
- 65 patients (48.9%) were treated with vasopressors infusion during surgery
- Even after weighting for smoking, DM, HTN, COPD, CHF, CAD, and CRI:
  - NO significant changes in the risk of leaks between the pre- and post- ERAS cohorts with RD -0.02, 95% CI -0.14-0.10
  - NO significant changes in the risks of leaks between the groups with or without vasopressor infusion RD 0.02, 95% CI -0.10,0.14

**Discussion**
- Increased use of vasopressor infusions as a part of GDFT in an ERAS pathway does not cause an increase in the rate of clinically significant pancreatic fistulas.

**References:**