Periampullary Tumors

Charles M. Vollmer Jr., MD
Professor of Surgery
Director of Pancreatic Surgery

Resident’s Teaching Conference
July 20, 2017
What are the periampullary tumors?
What is their expected survival?
How do they present?
How do you manage jaundice?
Role of a biopsy?
Our job is to ask two questions…

Can we do it?
Staging

Assessment of resectability by CT-Angiography or MRI

M,N,T

- Absence of metastasis
- *Distant* lymph node involvement
- Local relationships of tumor
Three Classes of Tumors

Clearly Resectable
Three Classes of Tumors

Clearly Unresectable (LA)
Three Classes of Tumors

Borderline Resectable

*Hmmh???
What is Borderline Unresectability?
What is Borderline Resectability?
How do we manage this?
Two Tools For This

Neoadjuvant Therapy

*Promise…not yet fulfilled.*

Vascular Resections

➢ Veins - Yes
➢ Arteries - Rarely
A word about nutrition?
Our job is to ask two questions…

Should we do it?
High-Acuity Surgery

Hurdles

Co-morbidities
  – Diabetes
  – Metabolic Syndrome: HTN, Obesity

It’s CANCER
  – Immunosuppression
  – Prothrombotic state
  – Malnutrition

Age…
Prediction Models

- ASA
- Charlson
- POSSUM
- Hopkins
- NSQIP (Surgical Calculator)
  WWW.FACS.ORG
- FOTB
Counterindications

O₂ Dependency
Wheelchairs
Cirrhosis
Dementia
Pancreatic Surgery
The Volume Effect

Lets go to the OR!
Laparoscopy anyone?
What’s the first step?
Staging
HPB Malignancy

Problem

Operability ≠ Resectability
Staging Laparoscopy

Considered Resectable Pre-Op

Total: 50
Laparoscopy: 39
Lap US: 28
Laparotomy: 26

4% False-Negative Rate

Conclusion: Patients can be spared useless laparotomy
Laparoscopic Staging

Utility of Staging Laparoscopy in Subsets of Peripancreatic and Biliary Malignancies

Charles M. Vollmer, MD,* Jeffrey A. Drebin, MD, PhD,* William D. Middleton, MD,† Sharlene A. Teeffey, MD,† David C. Linehan, MD,* Nathaniel J. Soper, MD,* Christopher J. Eagon, MD, and * Steven M. Strasberg, MD

From the *Section of Hepatobiliary-Pancreatic Surgery, Department of Surgery, and the †Department of Radiology, Washington University School of Medicine, St. Louis, Missouri

Does EVERY patient need it?  Probably Not.

Is it still relevant today?  Absolutely (maybe)
What’s the purpose of the Kocher?
How do you find the SMV?
What lurks in Tiger Country?

The Portal Triad
What is the Node of Importance?
Classical or PPPD?

Why is/was the stomach resected for this operation?
Why resect the proximal jejunum?
How do we remove the head of the pancreas?
Dissection off the Vessels
Vein Resections
How much Lymphadenectomy?
How do you deal with this?
What constitutes pancreatic fistula risk?
How do we mitigate pancreatic fistula?
The KISS Principle
Afferent Limb Reconstruction

- Pancreateicojejunostomy
- Hepaticojejunostomy
- Duodenojejunostomy

Common Hepatic Duct

Pancreatic Anastomosis
Antecolic vs Retrocolic
A Team Effort

- Interventional Endoscopy
- Pathology
- Radiology
- Medical Pancreatology
- Anesthesia
- Critical Care
- Interventional Radiology
- Nursing
- Social Work
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**Your Pathway To Recovery From Pancreatic Surgery**

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**Upper Abdominal Anatomy**

**Whipple Reconstruction**

**Distal Reconstruction**

**Double Bypass**
Today’s Whipple Procedure

- Safer than ever – esp. high volume centers
- Operative Mortality 1-2%
- Morbidity 20-25%
  - Anastomotic Leak/Fistula – 15%
- Long-Term Recovery
  - 3 Months
  - Diabetes (25%)
  - Exocrine Insufficiency (25%)

Ultimately, the quality of life (and palliation) is quite good, overall
Penn Outcomes

- Operability = Resectability
- Time… 4-6 hours

- Leaks: 10%
- Reoperation: 4%
- ICU use: 9%
- Transfusion Rate: 13%
- Mortality: 1.5%
- LOS: Average 7 - 8 days
- Readmission Rate: 18%

- Simplify: Clinical Pathway
  - (2/3 follow on course)
# Predictors of Survival

It’s about tumor biology

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Adjuvant Therapy

Chemo?

XRT?
The Whipple Procedure

- GI Disconnection
- Biliary Disconnection
- Pancreatic Disconnection
- Lymphadnectomty
- Fierce Vascular Disconnection
- Reconstruction
Satisfaction of a Cancer Survivor
Surgery for Pancreatic Cancer

Charles M. Vollmer Jr., MD
Associate Professor of Surgery
Director of Pancreatic Surgery

3rd Focus on Pancreatic Cancer
June 20, 2014

Penn Medicine
Underutilization of Surgery

28.6% of Clinical Stage 1 received surgery!!!!!!!!!!!

➢ Most were resectable (96%)

Why so few????

➢ Unidentified Reason (52%)
  ➢ 38% Not offered & 14% unknown
➢ Refused Surgery (4%)
➢ Contraindications (9%)
➢ Comorbidities (6%)

Predictors

➢ Medicare, Older, Black, Lower income, Less educated, Head Lesions, LV/Community Hospitals