MANAGEMENT OF AMPULLARY ADENOMA

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CASE PRESENTATION

• 68F s/p endoscopic papillectomy for low grade adenoma 2012
  – <2cm

• Re-excision of adenoma 2014 twice
  – Low grade dysplasia
  – Offered surgery, refused

• Obstructive jaundice
CASE PRESENTATION

- PSH: Cholecystectomy, appendectomy
- Social: ½ ppd x 40 years
- Family: Non-contributory
- Colonoscopy March 2015: 4 benign polyps
PHYSICAL EXAM

- T 98.4F    BP 121/71    HR 61    RR 12    100% RA

- Anicteric

- Abd: soft, epigastric tenderness, ND

- No rectal masses, Guaiac negative
LABS

- WBC: 7
- AST/ALT: 95/142, Alk phos: 597, T bili: 1.9
- Amylase: 125, Lipase: 101
IMAGING

• EUS/ERCP:
  – polypoid mass at ampullectomy site
  – CBD and pancreatic duct dilatation
  – Biopsy: carcinoma in situ

• Abdominal MRI/MRCP: 1.4x1.7cm periampullary lesion
  – No hepatic lesions or lymphadenopathy
OR

- Whipple (pancreaticoduodenectomy)
  - No evidence of metastatic disease
  - Pylorus sparing
  - No Involvement of SMA
  - JPx3: HJ, APD, PPD
POST-OPERATIVE COURSE

• TPN and Octreotide taper

• Clears POD#7, advanced

• Discharged home uneventfully
PATHOLOGY

• Ampullary adenocarcinoma (pancreaticobiliary type, well differentiated)
  – CBD and pancreatic margins negative
  – 1/13 lymph nodes positive (peri-pancreatic)
  – T2N1Mx (stage IIb)

• Adjuvant chemotherapy and radiation
OVERVIEW AMPULLARY ADENOMAS

• Anatomy and epidemiology

• Clinical features

• Diagnosis

• Management and controversy

• Summary
DEFINITION AMPULLA

• Junction of biliary and pancreatic ducts within duodenum

• Tumors usually detected earlier, more favorable prognosis
  - Intestinal better than pancreaticobiliary
EPIDEMIOLOGY AMPULLARY ADENOMAS

• Incidence 5 cases/million

• 20% tumor-related obstructions of the CBD

• Age 65, men

• Malignant transformation (>5cm)

• Sporadic or genetic (FAP)
CLINICAL FEATURES AMPULLARY ADENOMA

- Often asymptomatic
- Jaundice
- *weight loss*
- Occult bleed
- rarely cholangitis, pancreatitis
DIAGNOSIS AMPULLARY ADENOMA

- Elevated LFT, amylase/lipase

- EGD with side view and HD resolution
  - Single best test for diagnosis

- Endoscopic ultrasound (side view)
  - Depth, regional lymph nodes
  - Best staging test (Superior to CT and MRI)

- Transpapillary intraductal ultrasonography (IDUS)
  - Similar to EUS, not readily available

- ERCP
  - Visualize extent into biliary or pancreatic duct, decompress

- Biopsy
MANAGEMENT AMPULLARY ADENOMA

• Surveillance, endoscopic resection, or surgical intervention
  – Sporadic vs. FAP
  – Dysplasia
  – Size
  – Physical features
MANAGEMENT AMPULLARY ADENOMA

• Sporadic
  – Treat like flat adenoma colonic colon
    • US National Polyp Study

• FAP
  – Score < 8: surveillance
  – Score >/=8: endoscopic resection
  – High grade dysplasia: endoscopic resection

| Spigelman classification of duodenal polyps in familial adenomatous polyposis |
|---------------------------------|------|------|------|
|                                 | 1    | 2    | 3    |
| No. of polyps                   | 1-4  | 5-20 | >20  |
| Size (mm)                       | 1-4  | 5-10 | >10  |
| Histology                       | Tubulon | Tubulovillous | Villous |
| Dysplasia                       | Mild | Moderate | Severe |
MANAGEMENT AMPULLARY ADENOMA

• Size and physical features
  – < 1cm diameter, without ulcer, induration, or bleeding
  – >1cm diameter with ulcer, induration, and/or bleeding
    • Increased recurrence risk

• Dysplasia
  – Low grade
    • 15% coexistent cancer
  – **High grade**
    • 50% coexistent cancer
ENDOSCOPIC MANAGEMENT OF AMPULLARY ADENOMA

- Papillectomy vs. “ampullectomy”
- Braided vs. fine wire
- En bloc vs. piecemeal
  - Size (2cm cutoff)
  - Abnormal tissue after en bloc
- Sphincterotomy
  - No consensus
- Complications
  - Pancreatitis
    - Consider pancreatic stent placement

Prospective, randomized, controlled trial of prophylactic pancreatic stent placement for endoscopic snare excision of the duodenal ampulla

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WHEN CONSIDERING A WHIPPLE FOR AMPULLARY ADENOMA

- High grade dysplasia
- CiS or carcinoma
- Features of malignancy on EUS/ERCP
FOLLOWING AMPULLARY ADENOMA

• Surveillance
  – Generally 1-6 months following resection
  – Then, 3-12 months for 2 years
  – High grade dysplasia = more frequent surveillance

• Screening colonoscopy if sporadic ampullary adenoma

• FAP continue surveillance (even after proctocolectomy)
SUMMARY

• Ampullary adenoma premalignant

• Usually asymptomatic, jaundice when symptomatic

• Side view endoscope
  – Beware the false negative and coexistent cancer with dysplasia

• Grey areas regarding endoscope vs. surgery
  – Size, dysplasia, genetics, physical features aid in decision
REFERENCES

- The role of endoscopy in ampullary and duodenal adenomas. American Society For Gastrointestinal Endoscopy
- Mastery of Surgery
- Cameron 9th edition
- Schwartz 9th edition