Surgical Case Presentation

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History and Physical Examination:

- **CC:** Large colonic polyp
- **HPI:** 66 y.o. male with known CAD, status-post screening colonoscopy:
  - 4-cm, broad-based, flat polyp mid distal ascending colon
  - Tubulovillous adenoma on pathology
  - No gastrointestinal complaints
History and Physical Examination:

- Past Medical History:
  - HTN
  - DJD, Left Knee
  - Coronary Artery Disease; 2 known stenoses; Routine Stress-Thallium test pending

- Past Surgical History: None
History and Physical Examination:

- Allergies: None
- Medications:
  - Metoprolol
  - Lisinopril
  - Atorvastatin
  - Aspirin
History and Physical Examination:

- Family History: CAD in mother & two brothers. No malignancies.
- Social History: Former smoker, 10 pack-years
History and Physical Examination:

- Review of Systems:
  - Chest pain with moderate exertion
  - No melena, changes in bowel habits, or gastrointestinal complaints
History and Physical Examination:

- 5'3", 170 lbs
- Abdomen: Obese, no scars. Soft, palpable, right, mid-abdominal mass 10 x 10 cm. No tenderness, organomegaly, or other masses. No herniae.
Approach to Abdominal Mass:

RIGHT UPPER QUADRANT
Tender
- Liver in Hepatitis
- Congestive Heart Failure
- Gallbladder in Cholecystitis
- Subphrenic Abscess
- Perinephric Abscess
- Colonic Tumor
- Abdominal Wall Hematoma

Nontender
- Hepatomegaly
- Renal Tumor
- Adrenal Tumor
- Courvoisier's Gallbladder
- Hydrops of Gallbladder
- Fecal Impaction

RIGHT LOWER QUADRANT
Tender
- Appendiceal Abscess
- Psoas Abscess
- Pyosalpinx
- Regional Ileitis
- Intussusception

Nontender
- Carcinoma of Colon
- Ovarian Tumor

LEFT UPPER QUADRANT
- Splenomegaly
- Abdominal Wall Hematoma
- Pancreatic Tumor
- Pancreatic Cyst
- Gastric Tumor
- Colonic Tumor
- Renal Tumor or Enlargement
- Fecal Impaction

LEFT LOWER QUADRANT
- Sigmoid Diverticulitis
- Carcinoma of Colon
- Ovarian Tumor
- Pyosalpinx

HYPOGASTRIUM
- Bladder
- Gravid Uterus
- Uterine Fibroids
- Regional Ileitis
- Urachal Cyst

Laboratory Studies:

- Normal CBC
- Normal Chemistry Panel
- Normal Liver Function Tests
Initial Assessment & Plan:

- 66 y.o. male with CAD, tubulovillous adenoma, and palpable abdominal mass
  - 1) Follow up with cardiac evaluation
  - 2) Imaging to characterize palpable abdominal mass
  - 3) Plan surgical removal of polyp
Follow-up studies: CAD

- Stress Thalium: Reversible inferolateral defect. Ejection fraction 61%.
- Cardiac cath: 2 stents placed
- Cardiology Recommendations
Follow-up Studies: CT Abdomen
Follow-up Studies: CT Abdomen
Retroperitoneal Mass: Differential Diagnosis

- Lymphangioma
- Lipoma/fibroma
- Leiomyoma
- Adrenal Adenoma
- Nephrogenic cyst
- Retroperitoneal cyst
- Pheochromocytoma
- Hematoma

- Sarcoma
- Germ cell neoplasm
- Lymphoma
- Extension of primary tumor (renal, adrenal, colon, pancreatic)

Pre-op Work-up, Summary:

- 66 y.o. male with CAD, status-post stent placement x 2
- 4-cm Tubulovillous adenoma
- Large, right-sided, retroperitoneal, fatty tumor (Lipoma vs liposarcoma)
Referral To Tertiary Care Center

- Percutaneous biopsy?
- Colon resection with intra-operative biopsy?
- Colon Resection along with tumor resection?
  - En-bloc resection vs preservation of kidney?
Pathology:

- Retroperitoneal Tumor:
  - 25 x 15 x 10 cm
  - Well-differentiated liposarcoma
  - Microscopic extension to surgical margins

- Polyp:
  - Tubulovillous Adenoma with focal high-grade dysplasia
  - Negative margins
Post-operative Course:

- Uneventful Recovery
- Discharge Home Postoperative day 7
Retroperitoneal Sarcomas: Epidemiology

- 15% of all soft tissue sarcomas
- Peak incidence age 60
- Risk Factors:
  - Li Fraumeni Syndrome, Von Recklinhausen disease, Gardner Syndrome
  - History of irradiation

Retroperitoneal Sarcomas: Presentation

- Abdominal pain 40-60%
- Neurologic symptoms 30%
- Weight loss 15%
- Early satiety < 10%
- Nausea, vomiting < 10%
- Lower extremity swelling < 10%

Retroperitoneal Sarcomas: Evaluation

- Helical Abdominal CT
- Serum AFP, Beta HCG
- Testicular U/S
- Core Needle Biopsy if:
  - Germ cell neoplasm suspected
  - Lymphoma suspected
  - Neoadjuvant tx contemplated
- CXR

Retroperitoneal Sarcomas: Adjuvant Therapy

- **Adjuvant Radiation Therapy:**
  - Conflicting results for local recurrence, retrospective studies
  - Possible role for intra-op + post-op XRT (one RCT)

- **Adjuvant Chemotherapy:** No proven benefit

- **Neoadjuvant Chemotherapy** (doxorubicin, ifosfamide) under investigation

Retroperitoneal Sarcomas: Surgery

- Primary therapy
- Best outcomes with margin-free resections
- En bloc resection of adjacent organs in 53-83%

Retroperitoneal Sarcomas: Outcomes

▪ Median Survival:
  ▪ Resected primary disease: 72 mo
  ▪ Resected recurrent: 28 mo
  ▪ Metastases: 10 mo

▪ Survival after grossly incomplete resection equivalent to unresectable disease

Retroperitoneal Sarcoma
Outcomes: Relative Risks

- Death:
  - High-grade 3.2-5.4
  - + gross margin 4-5
  - Unresectability 4.7

- Local recurrence:
  - High-grade 2.0
  - Liposarcoma 2.6

- Metastasis:
  - High-grade 5.0
  - + gross margin 3.9
  - Liposarcoma 0.2

Table 2. Summary of the number of studies of retroperitoneal soft tissue sarcoma* demonstrating factors predictive of (“yes”) and not predictive of (“no”) local recurrence, distant recurrence, and mortality

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<th>Local recurrence</th>
<th>Distant recurrence</th>
<th>Mortality</th>
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<tr>
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<td>Incomplete gross resection</td>
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<td>2</td>
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<tr>
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*Studies [23–31]. All studies did not analyze all factors.

References:

