

Consultation  
02/01/2007

Reason for Consultation: Rectal bleeding

Thank you for involving me in the care of your patient. As you are aware, she is a 30-year-old white married female who began experiencing bloody stools about six months ago. At that time, she noted that she was having occasional blood with some loose stools and noted the bowel movements to be around six bowel movements per day. Over the last two months, this has gotten significantly worse to the point where she is now noticing that she has tissue and blood when she goes to the bathroom. The stools seem to be rather loose, and today she has had five to six bowel movements already, all of which are somewhat bloody with tissue-like material in them. She has also had episodes where she has gone to the bathroom and she has had simply just blood come out of her bottom with tissue-like material, without any stool. She denies any nausea, vomiting or abdominal pain, or any weight loss. However, she was pregnant about seven months ago and has lost weight because of her post-birth period. Otherwise, she also denies any joint pain, skin rashes or any eye problems.

Past Medical History: Unremarkable

Past Surgical History: Significant for breast biopsy

Family History: Significant for a grandmother with colon cancer, diagnosed at the age of 60. Mother and father have hypertension. Mother has many polyps. An aunt has colitis.

Social History: She does not use tobacco, occasionally uses alcohol, and occasionally uses Advil about one to two times per month.

Allergies: No known drug allergies

Medications: Currently none

Review of Systems: Negative for fevers, chills, chest pain, shortness of breath, dysuria, hematuria, lower extremity edema or gait abnormalities

Physical Examination:

Vital Signs: Blood Pressure: 118/68. Heart Rate: 70. Weight: 148 pounds

General: She is resting comfortably, in no apparent distress

HEENT: Throat is clear

Neck: Supple with no lymphadenopathy

Cardiovascular: Regular rate and rhythm

Chest: Lungs are clear to auscultation

Abdomen: Soft and nontender

Extremities: Reveal no cyanosis, clubbing or edema

Neurologic: She is grossly intact

Assessment: Bloody diarrhea along with blood per rectum, with tissue-like substance

Plan: At this point, given the long history, six months of bloody stools along with tissue-like material from the rectum and bowel movements that are bloody outside of passing of stool, I am concerned that the patient may have colitis, possibly an ulcerative colitis, maybe even a Crohn's colitis. At this point, I would recommend that she undergo a colonoscopy to evaluate her entire bowel, including her terminal ileum, to see if she has ulcers versus Crohn's colitis, which seems to be the largest part of my differential at this point. I will go ahead and schedule her for a colonoscopy and keep you informed as to the finding of our results.

Thanks again for involving me in the care of your patient.

Patient MR# 234567  
Patient Name: Barbara Rogan

Colorectal Advanced Case #2  
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Endoscopy Lab  
History & Physical  
02/09/2007

Indication for Procedure: Bloody diarrhea

Procedure: Colonoscopy

Allergies: NKDA

Physical Examination:  
Blood Pressure: 129/89  
Pulse: 67  
Respirations: 20  
SAO2: 100%

Findings:  
Ascending colon polyp, 3 cm flat, removed by snare cautery polypectomy  
Rectal mass 3-4 cm fungating appearing

Operative Report  
02/09/2007

Preoperative Diagnosis: Bloody stools and rectal bleeding

Postoperative Diagnosis: Colonoscopy to terminal ileum

Premedications: 200 micrograms of Fentanyl, 5 milligrams of Versed

Procedure: After obtaining informed consent, the patient was placed in the left lateral decubitus position on continuous blood pressure, pulse ox and cardiac monitoring. After incremental doses of Versed and Fentanyl were given and adequate sedation was achieved, the procedure was begun with a digital rectal exam. Then, the lubricated tip of the colonoscopy was introduced over finger guidance into the rectum and advanced with minimal difficulty all the way to the cecum which was identified by the ileocecal valve, trifold and appendiceal orifice. The scope was then advanced into the terminal ileum. Mucosa of the terminal ileum is noted to be normal. The scope was then withdrawn with careful observation of the mucosa. The cecum was noted to be normal. In the distal ascending colon, there was a 3 cm flat lesion between 2 folds that is different from the surrounding mucosa. It appears as a sessile polyp. Hypertonic saline was injected around it. The lesion is raised on a cushion of hypertonic saline and then removed with snare cautery polypectomy successfully. The scope was then withdrawn with careful observation of the mucosa. The transverse colon, descending colon are noted to be normal. The sigmoid was noted to be normal. In the rectum, the patient has a 4 cm fungating appearing mass over a fold at about 20 cm from the anal verge. Multiple biopsies were taken to rule out carcinoma. The scope was then withdrawn from the patient who tolerated the procedure well.

Findings:

1. Colonoscopy to terminal ileum, normal terminal ileum
2. Ascending colon polyp, 3 cm flat, removed by snare cautery polypectomy
3. Rectal mass 3-4 cm fungating appearing. Multiple biopsies taken to rule out carcinoma

Recommendations:

1. Follow-up on biopsy results
2. CT scan this week
3. Follow-up for surgical resection

Pathology Report  
02/09/2007

Clinical Information: Rule out adenoma

Gross Description:

Specimen #1 is labeled with the patient's name and "ascending polyp snared. Received in formalin are several soft red-tan tissues, 0.8 x 0.7 x 0.3 cm together.

Specimen #2 is labeled with the patient's name and "rectal mass cold biopsies". Received in formalin are several tan tissues, 0.5 x 0.4 x 0.2 cm together.

Slide Index:

- 1A Ascending polyp
- 2A Rectum

Final Diagnosis:

1. Ascending colon, polypectomy: Hyperplastic polyp
2. Rectal mass, biopsy: Adenocarcinoma

Comment: The rectal mass biopsy contains detached fragments of invasive, well-differentiated adenocarcinoma, associated with stromal desmoplasia and a tubulovillous adenoma with a high-grade dysplasia.

Material will be sent for EGFR analysis. A supplemental report will follow.

Patient MR# 234567  
Patient Name: Barbara Rogan

Colorectal Advanced Case #2  
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Pathology Report  
02/09/2007

Genzyme Impath

Body Site: Large intestine  
Specimen Received: 1-Paraffin

Therapeutic Analysis

Antibody/Test: EGFR pharmDx  
Marker For: Epidermal Growth Factor Receptor  
Results: Positive/3+

Comments: The EGFR pharmDx is FDA approved for use with formalin, PenFix, and Bouin's fixed tissues.

EGFR pharmDx is a trademark of DakoCytomation. EGFR pharmDx is an FDA approved test used as an aid in identifying colorectal cancer patients eligible for treatment with ERBITUX (Cetuximab). Reference ranges for this test in other cancer types are not approved at this time.

EGFR Negative      Absence of specific membrane staining within the tumor  
EGFR Positive      Positive (1+) staining is defined as any IHC staining of tumor cell membranes above background level

Staining Intensity      1+, 2+, 3+  
% of tumor cells staining      greater than or equal to 1%

Patient MR# 234567  
Patient Name: Barbara Rogan

Colorectal Advanced Case #2  
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Physician's Report Patient History  
02/20/2007

Date of Admission: 02/20/2007

Chief Complaint: Rectal bleeding

Present Illness: Cancer of rectum mass at 8cm T3N0M0

Social History: Negative tobacco, positive ETOH

Family History: Positive for colon cancer

CEA: 1.0 ng/mL

Operative Report  
02/21/2007

Preoperative Diagnosis: Rectal cancer. For neoadjuvant chemotherapy, radiation for stage II rectal cancer

Postoperative Diagnosis: Rectal cancer. For neoadjuvant chemotherapy, radiation for stage II rectal cancer

Procedure: Port placement in the left subclavian vein

Anesthesia: Local monitored anesthesia care

Blood Loss: None

Complications: Suture needle stick

Specimen: None

Procedure: The patient was taken to the operating room, was given IV sedation, and placed on the operating table in the supine position. Shoulder roll was placed and arms tucked at the side. The patient was prepped and draped in the usual sterile fashion. Surgical pause was carried out to identify patient and procedure. Using Seldinger technique and fluoroscopic evaluation, the subclavian vein was accessed under the clavicle, the guidewire introduced, and confirmed in position. Next, additional local anesthesia was injected in the left subclavicular area, and an incision was made to accommodate the single-lumen port. Once this was completed, the catheter was cut to the appropriate length. The dilator and sheath were inserted over the wire. The wire and dilator were removed. The catheter was inserted through the sheath. The sheath removed, leaving the catheter in place, which was confirmed in the superior vena cava on fluoroscopic evaluation. The port aspirated and flushed without difficulty. It was secured to the chest wall with a 3-0 Vicryl, then the wound was closed with 3-0 Vicryl suture, and 4-0 Vicryl was used to close the skin.

During the 4-0 closure, I incurred a needle stick in the left thumb. The glove was removed. The area was washed. There was a small amount of bleeding from the needle stick. The needle was removed from the field appropriately. Once this had been done, a second 4-0 Vicryl was used to complete the closure of the skin. A dry dressing was applied, and the patient was stable to recovery for a portable chest x-ray.

Will obtain consent from the family for evaluation of hepatitis, human immunodeficiency virus status.



## Discharge Summary

Date of Admission: 05/17/2007

Date of Discharge: 05/23/2007

Procedure: Laparoscopic-assisted low anterior resection, diverting ileostomy on 05/17/2007

### Discharge Medications:

1. Percocet for pain
2. Soma 350 milligrams every six hours for muscle spasm and Phenergan for nausea

Discharge Instructions: She is to follow up in the office in one week or call sooner for problems, fever, chills, nausea, vomiting, abdominal pain. Home health will visit her once a day for a week for ostomy care.

Discharge Condition: She is afebrile and tolerating a low residue diet. The incision is well-healed with no evidence of herniation. The JP drain was removed today.

Laboratory Data: Discharge laboratory evaluation within normal limits. Pathology reveals no residual tumor.

Discussion: This 30-year-old female with a diagnosis of rectal cancer and underwent neoadjuvant chemoradiation and then low anterior resection. Her surgery was uneventful. Pathology revealed no evidence of residual tumor. Her postoperative course was complicated by some prolonged pain medication requirements, however, this was resolved by the time of discharge and she was tolerating a low residue diet.

Operative Report  
05/17/2007

Preoperative Diagnosis: Rectal cancer, status post neoadjuvant chemoradiation

Postoperative Diagnosis: Rectal cancer, status post neoadjuvant chemoradiation

Procedure: Laparoscopic assisted low anterior resection, take down of splenic flexure, colorectal anastomosis and loop ileostomy

Anesthesia: General endotracheal

Complications: None

Estimated Blood Loss: 350 ml

Specimen: Sigmoid colon and rectum

Drains: Jackson-Pratt drain and Foley catheter

Indications: A 30-year-old female with rectal cancer diagnosed as stage II preoperatively underwent chemoradiation prior to surgery. She presents now 6 weeks following chemoradiation for definitive surgery.

Procedure: The patient was taken to the operating room, was given general anesthesia and placed in the lithotomy position in Allen stirrups. She was provided with a Foley catheter, orogastric tube and preoperative antibiotics as well as sequential compression hoses. She was then prepped and draped in the usual sterile fashion. Rigid proctoscopy again confirmed an almost complete response with a slightly ulcerated lesion in the mid rectum at 10 cm from the dentate line in the anterior wall. Through a subumbilical incision, the abdominal cavity was entered. A 12 mm balloon tipped trocar was inserted and secured to the fascia, and the abdomen was inflated with carbon dioxide to 15 mmHg. Next, a 5-mm trocar was placed in the right and left lower quadrants and suprapubic position under direct visualization, and then using atraumatic graspers and cauterized scissors, the sigmoid colon, left descending colon and splenic flexure was then mobilized with cauterized scissors. The omentum was taken off the transverse colon in order to allow full mobilization of the splenic flexure. The rectum was dissected laterally down to the level of the anterior peritoneal reflection. At this point, with the splenic flexure down, the sigmoid colon fully mobilized, the trocars were removed under direct visualization. The abdomen was deflated and the subumbilical incision was then connected to the suprapubic port site. Through a midline incision, the abdominal cavity was entered. A wound protector retractor was placed for exposure. The liver was palpated and no evidence of any metastatic disease. The small bowel and cecum were then retracted in the upper abdomen. The inferior mesenteric artery and vein were then ligated at its origin with Kelly clamps and secured with 0 Vicryl suture. The remainder of the mesentery to the sigmoid colon was divided between Kelly clamps and secured with 0 Vicryl suture. The bowel was divided with a 75 mm linear cutter stapling device. Both ureters were identified, and then in the presacral plane a ureter

to ureter complete mesorectal excision was performed down to the level of the levators. The anterior peritoneum was opened, and with the help of a lighted St. Mark's retractor, the vagina was retracted off the anterior rectal wall until the rectum had been fully mobilized using Bovie cautery. The ureters were uninjured during the dissection. The vagina was uninjured during the dissection. Rigid proctoscopy was again performed at this point which identified the lesion at the anterior peritoneal reflection as described preoperatively. A TX 60 stapling device was then placed well below this lesion, and the rectum was divided and resected with a scalpel. This was examined on the back table with a 4 cm gross distal margin from the previous ulcer bed of the tumor. This was marked with a suture. First gown and gloves were placed, and the pelvis was irrigated and suctioned clear and hemostasis verified and dry lap was placed in the pelvis. The uterus and ovaries and fallopian tubes were otherwise normal. The proximal colon was then brought into the field, the staple line was excised in the proximal colon, and a pursestring suture of 0 Prolene was placed. Then a 29 mm anvil was secured with a pursestring suture. Next, the power medical circular stapling device was then inserted through the anus up to the rectal stump. The vagina was retracted anteriorly. The spike was exposed. The anvil was connected and a circular anastomosis was then carried out in routine fashion. Both donuts were complete and intact and sent in separate specimen. Both ends of the bowel were viable and healthy with good blood supply with no evidence of any tension and no twisting of the anastomosis. Under pneumatic dilatation, there was no evidence of leak. Hemostasis was again confirmed in the pelvis. A sheet of Seprafilm was placed over the presacral space where the dissection had occurred. The ureters were again identified and uninjured. Next, the small bowel was placed back in its proper anatomical position. A Jackson-Pratt drain was brought down through the right lower quadrant trocar site and secured next to the skin with 2-0 nylon suture and placed behind the medial rectum in the pelvis. Next, at a previously marked site in the right abdomen adjacent to the umbilicus, a circular skin incision was made, the fascia was opened, the rectus muscle separated and the posterior fascia opened. The terminal ileum was brought through this incision for a loop ileostomy. Next, Seprafilm was placed beneath the incision and around the ostomy from the abdominal side, and the fascia was closed with running PDS suture. The subcutaneous tissue was irrigated and stapled and covered, and then the terminal ileum was opened and a loop ileostomy was matured with interrupted Vicryl suture of 3-0 size. Dry dressings and a loop ileostomy appliance were applied. The Jackson-Pratt drain was placed to bulb suction. The patient was extubated and stable to recovery. All final sponge and needle counts were correct.

Pathology Report  
05/17/2007

Clinical Information: Rectal cancer. Stitch marks old tumor.

Gross Description:

Specimen #1 is labeled with the patient's name and "segment of colon". Received in formalin is a colon segment, 14.5 cm long by 4 cm in diameter. The proximal; end is stapled closed and the distal end open. 2 cm from the distal margin and 4 cm from the proximal margin, the mucosa shows interpreted prior biopsy site, 0.6 x 0.6 cm. Adjacent to this there is a suture. The outer radial margin is inked blue. The remaining mucosa is rugated and pink-tan. There is no residual gross tumor.

Specimen #2 is labeled with the patient's name and "distal ring". Received in formalin is a 2 x 1.5 x 0.9 cm red-tan mucosa.

Slide Index:

- 1A Shaved proximal margin colon
- 1B Shaved distal margin colon
- 1C Perpendicular sections of outer radial margin
- 1D-E Prior biopsy site
- 1F-1G Lymph nodes in toto
- 2 Distal ring

Final Diagnosis:

1. Colon, segmental resection: Focal mucosal fibrosis, inflammation, dystrophic calcification and hemosiderin deposition. No residual viable adenocarcinoma identified. Benign surgical margins. Six benign lymph nodes (0/6).
2. Distal ring, excision: Benign colon tissue

Comment: The site of the prior tumor marked by suture exhibits fibrosis, inflammation, dystrophic calcification and hemosiderin deposition. Multiple deeper levels have been obtained and examined. There is no residual viable tumor identified. The area of fibrosis involves submucosa and does not appear to involve muscularis propria.

Pathology Report  
06/22/2007

Clinical Information: History of rectal cancer. Indwelling port not needed. Loop ileostomy/rectal carcinoma.

Gross Description:

Specimen #1 is labeled "port left chest". Received in formalin is a port, 3.2 x 3 x 1.5 cm. There is a plastic white tube, 14.6 x 0.2 x 0.2 cm. No sections are submitted. Gross only.

Specimen #2 is labeled "ileostomy". Received in formalin is a 5.5 x 2.5 x 1.5 cm open portion of bowel with one staple line. There is exposed bulging, erythematous red-brown mucosa consistent with an ostomy. On sectioning, the mucosa shows a pink-red folding architecture.

Slide Index:

2A Selected section ileostomy

Final Diagnosis:

1. Left chest, port removal: Indwelling port
2. Ileostomy, excision: Skin and small intestinal mucosa with acute and chronic inflammation.  
No carcinoma is identified.