



What Lies Beneath

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[CC] RLQ pain and RLQ abdominal mass

[HPI]

Patient is a 57-year-old male with no known past medical history. He is uninsured. The patient presents to ED with **RLQ pain and RLQ abdominal mass**. He first noticed a small "pimple" on RLQ approximately 8 months ago. The lesion gradually got bigger and bigger over the course, and started to show some exudates. However, due to his uninsured status, he did not seek any medical attention. About 3 days prior to the ED visit, he started to notice worsening pain, anorexia and severe generalized weakness. He finally presented to ED accompanied by his siblings.

[PE]

VS: Temp 37.1°C (97°F), HR 125bpm, BP 131/96mmHg, RR 20

General Appearance: Thin and cachectic.

HEENT: No conjunctival pallor. No cervical or supraclavicular lymphadenopathy.

Lungs: CTAB

Heart: Normal S1, S2. No murmurs, gallops, rubs.

Abdomen: Soft and flat. **There is a large (approximately 10cm X 10cm), indurated mass in RLQ with purulent mucous drainage from the self-raptured opening of the mass. (Image.1&2) The mass is tender, firm and immobile. The abdominal wall around the mass is also felt to be very firm.**

Rectal exam: No external mass or lesions. No rectal mass. No melena or hematochezia.

Questions:

1. What is the differential diagnosis? Any other additional pertinent HPI or physical findings you would like to obtain in order to make diagnosis?
2. What is the next step to make a diagnosis?



Answers:

1. Differential diagnosis includes but not limited to **cellulitis, abscess, ventral hernia, melanoma, malignant tumor**. You should obtain additional history about **signs and symptoms suggesting infection (such as systemic fever, purulent discharge from the lesion), or signs and symptoms to suspect malignancy (such as weight loss, family history)**. You may also want to obtain information about recent **bowel habit**.
2. Order **CT with contrast** to evaluate the characteristic and extension of the lesion. **NEVER perform incision and drainage!**

[Case Discussion]

Additional history taking revealed that the patient had **16kg (35.3lb) weight loss in 3 months**. He also admits having **occasional hematochezia and hematuria**. His last bowel movement was **4 days before the ED visit and had also not passed gas since**. He denied having systemic fever.

L/D showed **leukocytosis (WBC 10.1 X 10³/μL), anemia (Hb 11.4 g/dl, Ht 36.0 %)** and **thrombocytosis (PLT 61.4 X 10⁴/μL)**. Electrolytes, LFTs, renal function tests and ECG were unremarkable. CT with contrast showed **a large mass arising from the abdominal cavity, extending into the abdominal wall and protruding through skin surface**. Findings suggestive of **bowel obstruction and multiple lung metastasis were also noted**. Based upon these findings, **the diagnosis of direct abdominal wall invasion by colorectal cancer and malignant bowel obstruction was made**.

Surgery team was consulted and **emergent laparotomy with ileostomy and transverse colostomy was performed** to release malignant bowel obstruction. Later, the diagnosis was confirmed by tissue biopsy, which showed **adenocarcinoma of the abdominal wall**.

Clinical Pearls & Take Home Messages:

1. Direct abdominal wall invasion and implantation of the colorectal cancer is **very rare and making its diagnosis can be very challenging**.
2. This condition can easily be misdiagnosed as cellulitis or abscess initially. Do not jump onto thoughtless snap diagnosis without performing thorough history taking and physical exam.
3. **Be aware of the risk of performing incision and drainage, as it might unknowingly disseminate the malignant cells.**
4. POCUS can be useful in differentiating malignant tumor from subcutaneous abscess at the bedside.
5. Complications of abdominal wall invasion and implantation of colorectal cancer includes **malignant bowel obstruction and perforation of the bowel**. If there are concerning findings to suggest bowel obstruction or perforation (such as abdominal distention, peritoneal signs) in addition to abdominal wall mass, it could be a clue to this rare diagnosis.

Together, Do Better, Go Further, To Higher.