CLINICAL IMAGE

Beyond colonic neoplasia

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Question

An 81-year-old woman with hypertension and type 2 diabetes was admitted to the emergency department complaining of 2-months abdominal pain without fever, weight loss or abdominal trauma. Physical examination revealed a large palpable mass at the right iliac fossa. Laboratory parameters showed microcytic normochromic anaemia (haemoglobin:10.1g/dL) with normal white blood cell count (8.9x10^9/L) and C-reactive protein (0.49; N<0.5mg/dL). Plain abdominal X-ray showed no air-fluid levels or pneumoperitoneum. Abdominal ultrasonography was performed revealing a 9cm heterogeneous thickening of the mesenteric fat of the anterior abdominal wall at the right iliac fossa. Tumor markers (CEA and CA 19.9) were normal. Abdominopelvic computed tomography revealed a 10cm lesion at the right abdominal wall involving the ascending colon (Figure 1-A,B). Colonoscopy was performed with an intense cecum deformation with mucosal congestion (Figure 1-C).

What is the diagnosis and how it should be managed?

Answer

Deep intra-abdominal actinomycosis mimicking colonic neoplasia

Cecal biopsies were unspecific. A laparoscopic ileocecal resection was performed showing a 9 cm irregular white-greyish cecal mass with a marked inflammatory and fibrous process, and abscessed areas in the muscular/subserosa and abdominal wall, sparing the mucosa/submucosa. Abscessed areas showed sulfur granules containing filamentous bacteria suggestive of *actinomyces* (Figure 2). Antibiotic therapy was started with 4-weeks penicilin and 12-months oral amoxicillin. Clinical course was uneventful with no recurrence after 2-year follow-up.

Deep intra-abdominal actinomycosis is a rare chronic granulomatous infection caused by *Actinomyces israelii*. Disease often arises in immunocompromised patients or immunocompetent patients when mucosal barrier is disrupted. Predisposing factors include previous abdominal surgery, bowel trauma, inflammatory disease and intrauterine contraceptive devices. Abdominopelvic involvement occurs in 20% of cases with the appendix and cecum being frequently involved. Its clinical presentation, insidious course with abdominal mass-forming and imaging features can mimic colorectal cancer. Surgery is often required to rule out malignancy. We report a rare case of deep intra-abdominal actinomycosis presenting as a pseudotumoral mass involving the cecum with abdominal wall extension, without predisposing factors. Surgery was performed to exclude malignancy. This condition should be considered in the differential diagnosis of an abdominal mass of uncertain origin, avoiding surgery-associated morbidity and mortality.

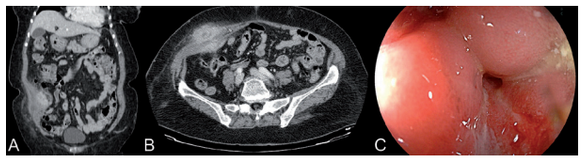

Figure 1. — Abdominopelvic computed tomography revealed a 10cm inflammatory lesion at the right abdominal wall, involving intra-abdominal fat and the ascending colon. (A) coronal view, (B)axial view. Colonoscopy showed a congestive and deformed cecum (C).

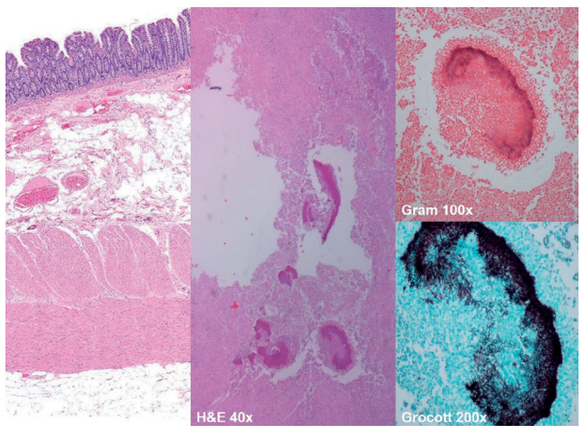

Figure 2. — Histopathology showing abscessed areas with eosinophilic structures containing actinomyces (positive Grocott staining).

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