Colonic mass secondary to actinomycosis: A case report and literature review

Tumoración colónica secundaria a actinomicosis. Presentación de un caso y revisión de la literatura

Actinomyces spp. are Gram-positive facultative anaerobic bacteria that form part of the normal flora of the oropharynx, the gastrointestinal tract, and the female genital tract. The microorganisms are opportunistic pathogens when there is disruption of the mucus membranes after inflammation, trauma, surgery, or use of an intrauterine device. The location of up to half of the cases is cervicofacial, followed by a 20% frequency of abdominal location.

We present the case of a 58-year-old woman that sought medical attention for abdominal pain in the right flank of 2-month progression, changes in bowel habit with constipation, and a 5 kg weight loss. Upon admittance her vital signs and laboratory tests were within normal limits. During physical examination a mass in the right iliac fossa was detected that was slightly painful upon palpation; there were no peritoneal irritation data. A strictured lesion in the cecum was encountered through colonoscopy. Biopsies were taken that only revealed nonspecific chronic inflammation. An abdominal tomography scan identified a 5 cm tumor at the level of the cecum, with thickening of the wall in the terminal ileum and the cecum; adenopathies were also identified. Given these findings, 4-month therapy with amoxicillin plus clavulanic acid was begun. Postoperative progression was satisfactory and the patient was released 4 days after the surgery. Actinomycosis is a chronic suppurative disease that presents with the formation of fistula, sinus, inflammatory pseudotumor, or abscess. These are the characteristics that make it necessary to consider inflammatory bowel disease, inflammatory pelvic disease, and tuberculosis in the differential diagnosis. The infection can simulate malignancy due to its capacity to invade adjacent tissue and form masses. Up to 80% of the cases occur in women and 60% are associated with the lumen, along with a poorly delineated abscess-like lesion in the cecum. A pericecal abscess with extensive Actinomyces spp. colonization, "sulfur granules," and acute and chronic inflammation were viewed during the histopathologic study (fig. 2). Given these findings, 4-month therapy with amoxicillin plus clavulanic acid was begun. Postoperative progression was satisfactory and the patient was released 4 days after the surgery. Actinomycosis is a chronic suppurative disease that presents with the formation of fistula, sinus, inflammatory pseudotumor, or abscess. These are the characteristics that make it necessary to consider inflammatory bowel disease, inflammatory pelvic disease, and tuberculosis in the differential diagnosis. The infection can simulate malignancy due to its capacity to invade adjacent tissue and form masses. Up to 80% of the cases occur in women and 60% are associated with the lumen, along with a poorly delineated abscess-like lesion in the cecum. A pericecal abscess with extensive Actinomyces spp. colonization, "sulfur granules," and acute and chronic inflammation were viewed during the histopathologic study (fig. 2). Given these findings, 4-month therapy with amoxicillin plus clavulanic acid was begun. Postoperative progression was satisfactory and the patient was released 4 days after the surgery. Actinomycosis is a chronic suppurative disease that presents with the formation of fistula, sinus, inflammatory pseudotumor, or abscess. These are the characteristics that make it necessary to consider inflammatory bowel disease, inflammatory pelvic disease, and tuberculosis in the differential diagnosis. The infection can simulate malignancy due to its capacity to invade adjacent tissue and form masses. Up to 80% of the cases occur in women and 60% are associated with the lumen, along with a poorly delineated abscess-like lesion in the cecum. A pericecal abscess with extensive Actinomyces spp. colonization, "sulfur granules," and acute and chronic inflammation were viewed during the histopathologic study (fig. 2). Given these findings, 4-month therapy with amoxicillin plus clavulanic acid was begun. Postoperative progression was satisfactory and the patient was released 4 days after the surgery. Actinomycosis is a chronic suppurative disease that presents with the formation of fistula, sinus, inflammatory pseudotumor, or abscess. These are the characteristics that make it necessary to consider inflammatory bowel disease, inflammatory pelvic disease, and tuberculosis in the differential diagnosis. The infection can simulate malignancy due to its capacity to invade adjacent tissue and form masses.
In conclusion, actinomycosis should be included in the differential diagnosis of infiltrating tumors in the right colon, emphasizing the fact that in the majority of cases laboratory tests are normal and there are no adenopathies. A mass with attenuated focal areas invading adjacent structures is a characteristic finding in tomography scans. Even though Actinomyces normally reside in the appendix, there are few reports in the literature of cases in which appendicitis is the abdominal inoculation mechanism.

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Conflict of interest

The authors declare that there is no conflict of interest.

Bibliography

Reversal of acute liver failure with N-acetylcysteine and prednisone in a patient with DRESS syndrome: A case report and literature review

Falla hepática aguda en una paciente con síndrome de DRESS que revirtió con N-acetilcisteína y prednisona. Reporte de caso y revisión de la literatura

Drug Rash with Eosinophilia and Systemic Symptoms (DRESS) is an idiosyncratic reaction to medication that is characterized by skin rash, hematologic alterations, and organ involvement. It has been related to the ingestion of phenytoin and other anticonvulsant agents. Skin reactions have been described in up to 19% of patients between 6 and 8 weeks after drug initiation. The mortality rate is above 10% and death is commonly secondary to acute liver failure (ALF).

One month before her hospital admittance, a 46-year-old woman presented with subarachnoid hemorrhage due to a ruptured aneurysm of the posterior left cerebral artery; the affected vessel was clipped and she began adjuvant management with 100 mg of phenytoin every 8 h. She had no past history of herbal medicine or alcohol consumption, or prior use of other medication or hepatotoxic agents. Forty-eight hours after drug initiation, the patient noticed maculopapular lesions on both hands that resolved spontaneously, with no other symptoms. Three weeks later the maculopapular lesions became generalized and turned into an exfoliative dermatitis. She developed unmeasured fever along with pruritus, jaundice, and choloria. Upon hospital admittance the patient presented with dehydration, jaundice, generalized maculopapular lesions with fine flaking (fig. 1), cervical adenomegaly, hepatomegaly of 3 cm under the costal margin, and no hepatic encephalopathy (HE). Her laboratory tests reported: leukocytes 5,000 L−1, eosinophils 1,800 L−1, urea 104 mg/dL, creatinine 5.6 mg/dL, total bilirubin 8.6 mg/dL, albumin 2.9 g/L, alanine aminotransferase 171 U/L, aspartate aminotransferase 333 U/L, alkaline phosphatase 751 U/L, gamma-glutamyl transpeptidase 1,814 U/L, prothrombin time 38%, and international normalized ratio (INR) 1.8. Cultures had no pathogen development, the viral panel was negative for hepatitis A, B, and C, and cytomegalovirus (CMV) and Epstein-Barr virus (EBV) IgM serology were negative. Abdominal ultrasound showed no chronic hepatopathy data, no biliary tract dilation, no vascular thrombosis, and no alterations in either kidney. Management was begun with prednisone 1 g/kg of weight and pentoxifylline 300 mg every 6 h; on her second day in the hospital, the patient presented with stage 2 hepatic encephalopathy characterized by asterixis and bradypsychia. The data indicated: stage 2 HE, INR

Figure 1 Cutaneous lesions characteristic of DRESS. A, A') Upon admission. B) Progression after 4 days of treatment. C) Day 6 of treatment.