Rectal syphilis: A case report

Sífilis rectal: reporte de un caso

Syphilis is a systemic disease caused by the spirochete, Treponema pallidum. Its prevalence is 5 million new cases diagnosed annually and the majority of cases, estimated at 75%, are men that have unprotected anal sex with men.1 Syphilis and human immunodeficiency virus (HIV) coinfection is very common, and its prevalence varies from 45% to 79%.2

A 35-year-old man was diagnosed with HIV 3 years earlier and is undergoing treatment with a combination of tenofovir 300 mg + lamivudine 300 mg + efavirenz 400 mg, one tablet daily. The patient had a history of unprotected anal sex with men and sought medical attention due to straining, tenesmus, and rectal bleeding of two-week progression. Physical examination revealed multiple anal fissures. Laboratory work-up reported hemoglobin 15.2 g/dl, leukocytes 6,670 mm,3 HIV viral load 22.4 copies/mL, and CD4+ (T-helper) lymphocytes 765 cells/μL. Serum FTA-ABS was positive, RPR was reactive (RPR titer 1/4), and serum VDRL was reactive (VDRL titer 1/4). Chlamydia trachomatis IgG antibodies were reported at 348.5 RU/mL and IgM antibodies at 14.6 U/mL (positive >14). Proctoscopy revealed multiple erosions and rectal ulcers with raised edges and clean bases (Fig. 1a and b). Histology reported lymphoplasmacytic inflammatory infiltrate in the lamina propria, associated with cryptitis and crypt microabscesses (Fig. 1c). Warthin-Starry staining identified multiple spirochetes (Fig. 1d). A single dose of intramuscular benzathine penicillin G (2.4 million units) was administered. At the control follow-up at three weeks, the patient was asymptomatic, and proctoscopy revealed the ulcer healing process (Fig. 2).

Syphilis is a systemic disease that can sometimes affect the gastrointestinal tract. The present case describes a young man with HIV that practiced unprotected sex with men. Physical examination revealed multiple anal fissures, leading to the diagnostic suspicion of an infectious disease.3-4 Clinical manifestations include anal pain, tenesmus, fecal urgency, purulent secretion, and rectal bleeding.5 The diagnosis of syphilis requires non-treponemal and treponemal antibody tests. Warthin-Starry staining can identify spirochetes. Nevertheless, we suggest the PCR test in rectal biopsies, which has 70–95% sensitivity and 92–98% specificity.6 Chlamydia trachomatis infection, herpes simplex virus, and cytomegalovirus should be taken into account in the differential diagnosis in immunocompromised patients that practice unprotected sex, otherwise, neoplastic disease or inflammatory bowel disease should be considered.7,8 Local complications can include stricture, obstruction, and perforation of the rectum.7

In conclusion, rectal syphilis is rare and tends to present with ulcers and symptoms of proctitis. Opportune diagnosis is important, given that treatment is easy to carry out and offers a good prognosis, if administered in the early phase, thus preventing complications, such as neurosyphilis or severe damage to the heart.

Ethical considerations

The authors declare that no experiments on humans were carried out for this research. Database protocols of the authors’ work center were followed, preserving patient anonymity. This study meets the current bioethical research norms, (thus informed consent was not requested), was approved by the Ethics Committee of the Hospital Belén de Trujillo.

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Conflict of interest

The authors declare that there is no conflict of interest.
Figure 1  (a) Multiple rectal ulcers. (b) Rectal ulcer with raised edge and clean base. (c) H&E staining showing the lymphoplasmacytic infiltrate and cryptic abscess. (d) Warthin–Starry staining showing multiple spirochetes.

Figure 2  (a, b) Control proctoscopy showing the healing process of the ulcers in the distal rectum.

References

Severe gastroduodenitis due to *Strongyloides stercoralis* infection: An unusual cause of intestinal obstruction

Gastroduodenitis severa por *Strongyloides stercoralis*: una causa rara de obstrucción intestinal

*Strongyloides stercoralis* (*S. stercoralis* or *Ss*) is an intestinal nematode that is highly prevalent in tropical regions of Africa, Asia, and South America\(^1\). Approximately 50-100 million individuals are infected worldwide, particularly in Brazil and Thailand, with a prevalence of 13% and 23.7%, respectively\(^1\). The majority of infected persons are asymptomatic, but some, especially immunocompromised individuals, have severe manifestations\(^2-3\).

A 16-year-old male from Tabatinga, in the Brazilian state of Amazonas, sought medical attention at a hospital in Leticia, due to the 3-week progression of fever, epigastriac abdominal pain radiating to the right iliac fossa, excessive vomiting, bloody diarrhea, and weight loss (20 kg). Laboratory work-up results were leukocytosis (20,600/mm\(^3\)), neutrophilia (17,922/μl), and thrombocytosis (610,000/μl); human immunodeficiency virus was negative; and *Ss* was detected in stool, for which the patient received ambulatory treatment with a subtherapeutic dose of albendazole.

His fever persisted and the patient had bilious vomiting and increased abdominal pain at one week of treatment. He went to the emergency room, where signs of peritoneal irritation were documented. An exploratory laparotomy was performed, revealing an indurated retrocecal appendix that was then resected.

Nevertheless, the patient continued to present with fever, excessive vomiting, and a lack of bowel movements for one week. He was referred to the *Hospital Internacional de Colombia (HIC)* on day 10 of his hospitalization.

The patient was in poor general condition and hemodynamically unstable. He also presented with high biloenteric output through the nasogastric tube and had signs of peritoneal irritation. Anthropometry revealed weight of 39 kg (P\(0\), \(-3.10\ SD\)), height of 150 cm (P\(0\), \(-2.9\ SD\)), and BMI of 17.3 kg/m\(^2\) (P\(6\), \(-1.5\ SD\)). The patient required vasoactive support (norepinephrine). Severe anemia was reported (Hb: 7 g/dl) and he underwent red blood cell transfusion. Contrast abdominal tomography identified generalized distension of the small bowel segments and thickening of the duodenal wall. Panendoscopy revealed severe erosive gastroduodenitis, pseudomembranes, and multiple inflammatory pseudopolyps in the duodenal bulb (Fig. 1). The histologic study reported severe gastroduodenitis due to *Ss* (Fig. 2). Management with ivermectin 200 μg/kg/day, oral albendazole 800 mg/day, and endove-

**Figure 1** Edematous mucosa with a nodular pattern, erythema, and ulcers of the duodenal bulb can be seen.

**Figure 2** Fragments of *Strongyloides stercoralis* larvae (arrow).