CLINICAL GRAND ROUND

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Reason for consultation and present illness

62 year old woman

- Reason for consultation: diarrhoea
- History of present illness
  - Watery diarrhoea, 5-10 times per day
  - Duration: 4 months
  - Associated with nausea, vomiting, abdominal pain and weight loss (10 kg)
  - Followed up at a different institution, treated empirically a week before with metronidazole with no clinical improvement
**MEDICAL & PERSONAL HISTORY**

- **Medical history**
  - Giardiasis: 2016 and 2017 after returning from Ecuador
  - Cholecystectomy 2001, acute pancreatitis 2005

- **Personal history**
  - From Ecuador, resident in Spain since 1998 with frequent visits to Ecuador, last one in 2017
  - G7P2
**Physical Examination**

BP 83/57 mmHg

Signs of dehydration

Abdominal pain to palpation with no signs of peritoneal irritation
LABORATORY RESULTS & COMPLEMENTARY TESTS

- FBC: 12500/mm³ leukocytes, 26% neutrophils, 65% lymphocytes (8180/mm³)
- K 2.9 mEq/L
- Bilirubin 1.40 mg/dl, GPT 71 U/L (NR 5-40), GOT 100 U/L (NR 4-50)
- Serology
  - HIV (-)
  - HCV (-)
  - HAV IgG (+) IgM (-)
  - HBV: anti-HBs (+), anti-HBc (+), HBs antigen (-)
  - T. cruzi IgG(-), F. hepatica IgG(-), L. infantum IgG+IgM(-)
  - Strongyloides spp. IgG: Indeterminate (Index: 0.95)
LABORATORY RESULTS & COMPLEMENTARY TESTS

- Stool
  - Bacterial culture (-)
  - GDH (-)
  - Parasite antigen detection:
    - *Giardia intestinalis* (-)
    - *Cryptosporidium* spp. (-)
    - *Entamoeba histolytica* (-)
  - Nematode larvae culture (-)
Laboratory results & complementary tests

At this point, would you order any other complementary tests?

- TSH 4.984 mUI/L (NR 0.350-4.950)
- Free T4 0.81 ng/ml (0.7-1.6)
- Amylase 50 U/L (NR 25-125), lipase 21 U/L (NR 8-78)
- Antitransglutaminase antibodies (-) with normal IgA
- ANA (-)
- calprotectin (-)
- Normal colonoscopy, with biopsy results pending
LABORATORY RESULTS & COMPLEMENTARY TESTS

Microscopic examination of the stools after concentration, Kinyoun and auramine stains showed the following:
LABORATORY RESULTS & COMPLEMENTARY TESTS

Peripheral blood smear
Treatment for *Cystoisospora belli* was started with trimethoprim-sulfamethoxazole (TMS) with a marked clinical improvement.

Chemiluminescence immunoassay (CMIA) for HTLV IgG: **POSITIVE**
Western blot and PCR: **POSITIVE** HTLV-1
Complementary Tests

- Peripheral blood cytometry and bone marrow biopsy: **adult T-cell leukemia**.
- Colon biopsy: lymphatic and lamina propria infiltration by lymphocytes with multilobulated nuclei and intense basophilic cytoplasm.
- 18F-FDG PET showed no other signs of extension.
Summary

Chronic diarrhoea due to *Cystoisospora bellii* infection

Adult T-cell leukemia related to HTLV-1, chronic variant
TREATMENT AND EVOLUTION

Treatment was started with Zidovudine and pegylated interferon-alfa 2a.

Good response but with side effects due to interferon. Diarrhoea after discontinuing TMS; currently with secondary prophylaxis.

We were able to contact one of her daughters who tested negative for HTLV.
**Take Home Messages**

- Importance of **microscopy** in diagnostic tests
- Consider immunosuppression in chronic infectious diarrhoea other than HIV
- Family screening in HTLV infection due to high rates of vertical transmission and prolonged asymptomatic periods
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Thank you for your attention!