

The first lumbar puncture PCR was possibly negative due to the small sample; in the second one, a greater amount could be collected.

Given the positive CMV PCR, CMV papillitis was diagnosed. In a study⁵ that evaluated PCR for the diagnosis of infectious uveitis in the posterior segment, it is concluded that when there is involvement of the optic nerve, the result is more likely to be positive. However, 71% of the patients had inflammation of the anterior chamber and none presented an isolated papillitis.

Analysis by aqueous humour PCR has also been studied in patients with CMV retinitis, confirming the high sensitivity and specificity of this test in different studies, although in many it is not necessary if there is inflammation of the anterior chamber.^{6–8} This is the first case to date of isolated papillitis in which the aqueous humour analysis determined the cause of the infection.

CMV retinal involvement is a cause of blindness in patients with acquired immunodeficiency syndrome; however, there are few cases described in children with ALL.^{3,9} Our patient had no retinitis, but an isolated papillitis; no papillitis has been described in any child with ALL.

Given the low incidence of CMV papillitis in the paediatric population, we believe it is important to publicise this manifestation for it to be taken into account in the differential diagnosis of leukaemic infiltration. Aqueous humour analysis is a useful technique to establish this diagnosis and carry out an appropriate treatment.

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Acute abdominal pain as the initial manifestation of meningococemia in adult patient



Dolor abdominal agudo como manifestación inicial de meningococemia en un paciente adulto

Acute abdominal pain as the initial presentation of a *Neisseria meningitidis* infection is very uncommon. It is more frequent in the pediatric age, but very rare in adult population. Here we present a case of meningococemia. The patient was a 91-year-old woman admitted to the hospital due to pain in the epigastrium and right flank, nausea and a one-day history of distemper. She had a history of a right hemicolectomy, due to a neoplasm of the right colon. On admission the physical examination showed the following: temperature of 38.3 °C, blood pressure of 166/71 mmHg. The patient was conscious and oriented, without neck stiffness. In the analysis, the following data were highlighted: polymorphonuclears (PMNs) 86.5%, lymphocytes (LYM) 7.9%: CD4/217 mm³, CD8 113/mm³, creatinine 1.42 mg/dL, estimated glomerular filtration rate 34.54 mL/min, C-reactive protein 0.58 mg/dL, AST and ALT level were elevated. In the urine analysis, she had positive nitrites and 61 leukocytes/μL. Negative serology for influenza A, B. An abdominal ultrasound was performed, where only a discrete bilateral pleural effusion was observed. Gram-negative diplococci were detected in blood cultures, subsequently identified by PCR technique as *N. meningitidis* (finally identified as serogroup Y). Lumbar puncture was performed and the cerebrospinal fluid

showed the following: glucose 167 mg; proteins 114.2 mg/dL; red cells 4/mm; leukocytes 7/mm (PMNs 14.3%, LYM 85.7%). The initial antibiotic therapy was adjusted to ceftriaxone. The patient presented a clinical worsening 24 h after hospital admission, and finally died 72 h after admission.

N. meningitidis is a Gram-negative, oxidase-positive, aerobic bacterium. The different strains are classified into serogroups according to the polysaccharides of the capsule, the most frequent being two A, B, C, Y and W-135. The mortality rate is 20% for meningococemia despite treatment with antimicrobials. The immune system plays an important role in protecting the host from meningococcal disease, and diseases associated with immunocompromised conditions like human immunodeficiency virus, antecedent infection, have been reported as some of the significant risk factors.¹ In our case the patient presented a low CD4 count as well as hypogammaglobulinemia, suggesting that immunosenescence could have been a contributing factor.² The initial symptoms at the onset of the disease can vary in time and frequency, being abdominal pain an infrequent symptom of early appearance, that can occur in isolation, as well as in the context of a meningococcal sepsis.³ The pain is usually located in the right hemiabdomen which can make it difficult to differentiate from other pathologies. Leading to surgical intervention and subsequent delay in the proper management of this entity, explaining the high morbidity and mortality rates.⁴

Recently, 105 cases of unusual initial abdominal presentations of meningococemia were described in France. Abdominal

presentations represented 1% of all meningococcemias and 64% of them started with abdominal pain as the initial symptom in the first 24 h. Since 2014 it seems that abdominal presentations have increased related to the spread of NmW/CC11 isolates of the South American-UK strain.⁵ It seems reasonable that meningococemia is considered in the differential diagnosis of abdominal pain in patients where imaging studies do not show clear findings explaining the patient's symptoms, even in very old patients.

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