Peritonitis due to *Mycoplasma*?

Nefrologia 2010;30(4):484
doi:10.3265/Nefrologia.pre2010.May.10414

Dear Editor,

We present the case of a patient with chronic kidney disease (CKD) undergoing automated peritoneal dialysis that presented a probable episode of peritonitis due to *Mycoplasma hominis*.

The case was a 45 year old woman diagnosed with CKD secondary to ureteral reflux in infancy, with two failed kidney transplants and with vascular access problems. She began peritoneal dialysis in 2008 and had suffered a previous episode of peritonitis with poor evolution and negative cultures, for which she was temporarily transferred to haemodialysis. She once more returned to peritoneal dialysis in July 2009. She came in to the peritoneal dialysis unit with abdominal pain and turbid fluid. On examination she presented signs of peritoneal irritation. A peritoneal count was made and 600 WBC/μl, with 90% polymorphonuclear cells were found. Samples of peritoneal fluid were sent for culture, and ambulatory intraperitoneal antibiotic treatment was begun with vancomycin and ceftazidime. At 48 hours abdominal pain had increased and the WBC in effluent peritoneal fluid had increased to 13,000, due to which she was admitted to hospital. She had high leukocytosis and PCR. Treatment was changed to intraperitoneal amikacin and intravenous tazocel, and yeast prophylaxis was initiated. Vaginal and urethral exudates were sent to culture; the patient reported perineal discomfort. An abdominal ultrasound was performed and no acute pathological condition observed. From this moment on there was a slow decrease in the number of cells in the peritoneal fluid count. Bacteriological cultures were negative. Negative culture peritonitis should not be above 20% and are more frequently seen in patients with previous exposure to antibiotics; they are also associated with longer hospital stays, more catheter withdrawal and more transfers to hemodialysis,[1] such as the patient suffered before.

M. hominis was cultured in urethral exudates and, initially was not considered pathogenic. *M. hominis* can be found in the genital tract in 37.5 to 75% of sexually active women. Peritonitis of gynaecological origin has been reported, although *Mycoplasma* isolation was anecdotal.[2] *Mycoplasma* are prokaryote microorganisms with no cell wall that habitually colonise the respiratory and urogenital mucose membranes and that can cause infection, especially in immunodepressed patients. As they have no cell wall the Gram stain is always negative and culture is difficult; for this reason diagnosis of *Mycoplasma* infections are based mainly on serological tests. Tetracyclines and fluoroquinolones have excellent activity on these microorganisms.[3-6]

After 21 days of treatment peritoneal counts continued to be of about 150-200 cells with persistently negative mold and mycobacterial cultures and Gram stains. Antibiotic treatment was then suspended. The patient's clinical evolution had been favourable, leukocytosis had also disappeared and CRP was almost normal. For this reason the catheter was not withdrawn, as had been necessary in the previous case; furthermore, this patient had serious vascular access problems. We continued to perform peritoneal counts that continued to be pathological, therefore tetracyclines were given orally, and 72 hours after initiating treatment WBC in peritoneal fluid was below 100. Ten days of treatment were completed.

Our diagnosis was probable peritonitis due to *M. hominis*.

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Received: 30 Abr. 2010 | Accepted for publication: 5 May 2010

Infectious Endocarditis, Pneumonia, Bacteraemia and Meningitis due to Staphylococcus aureus in a Patient with Terminal Renal Disease. A Case Study

Nefrologia 2010;30(4):485-6
doi: 10.3265/Nefrologia.pre2010.May.10421

Dear Editor,

We present a case of septicaemia, endocarditis, meningitis and pneumonia