Repeated pancreatitis in peritoneal dialysis patient

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Dear Editor,

We are describing the case of a peritoneal dialysis patient who suffered two outbreaks of acute pancreatitis in four months.

27 year old male who was attended at the Dialysis Unit complaining of epigastrium pain lasting 12 hours and vomiting. Patient history: chronic renal failure stage 5 secondary to diabetic nephropathy. Acute peritonitis due to *Staphylococcus epidermidis* in September, with relapse in October, treated with vancomycin with culture negativization and normalisation of cell counts.

Physical examination revealed marked epigastrium pain. Cell count: 50 leukocytes (65% PMN), amylase 423IU. Other analytical data: leucocytosis 25,700 (92% neutrophils); urea 106mg/dl; creatinine 9.4mg/dl; CRP 24g/l; amylase 172IU/l. Cultures of peritoneal liquid negative. Given the presence of amylases > 100IU/l in the peritoneal liquid and the clinical suspicion of pancreatitis, an abdominal Computed Axial Tomography (CAT) scan was performed: rarefaction of peripancreatic fat and a large amount of free fluid, mainly peripancreatic and perihepatic (figure 1.) Initially, the patient improved. He remained on peritoneal dialysis and metabolic or infectious causes of the pancreatitis were excluded. Four days following admission, the patient presented with fever and peritoneal liquid with more than 100 leukocytes (80% PMS/amylases < 100IU.) Given the history of previous peritonitis due to *Staphylococcus epidermidis* with subsequent relapse, it was decided to remove the peritoneal catheter and change to haemodialysis. Subsequent evolution was favourable, the fever disappeared and the patient showed clinical improvement.

Two months following the removal of the catheter, and due to preference for this technique, peritoneal dialysis was restarted. Two days later, the patient was seen again with a clinical picture similar to acute pancreatitis, confirmed by cell count of leukocytes of 153 (26% PMN), amylase 418. Abdominal CAT showed moderate acute pancreatitis. On admission, treatment with antibiotics, digestive rest and fluid therapy was started. Peritoneal dialysis was ceased and patient was transferred to haemodialysis. The patient improved CT peritoneography was performed, and flow of contrast to the retroperitoneum was not observed. Upon release from hospital, peritoneal dialysis was definitively suspended due to its temporal link to the episodes of pancreatitis. The patient has currently been undergoing haemodialysis for 14 months without presenting any new episodes of pancreatitis.

Acute pancreatitis is a common complication of patients undergoing peritoneal dialysis. The following have been considered as causal factors: metabolic abnormalities (absorption of glucose and dialysis liquid buffers), infectious stimulus (repeated outbreaks of peritonitis) or irritation of the pancreas via the epiploic foramen, due to hypertonicity or acidic pH.

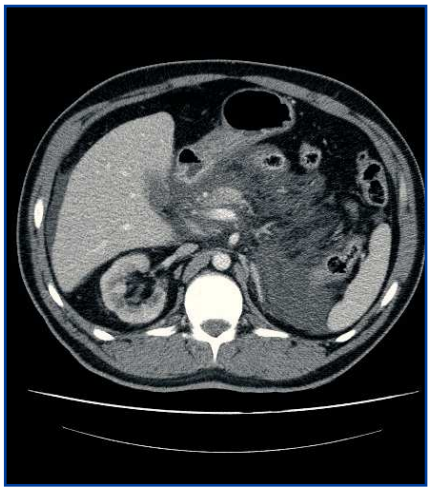

Figure 1.

Our patient did not present metabolic or infectious factors and perhaps there was an anatomic abnormality of the pancreas which, along with the infectious stimulus of the peritonitis, led to the patient suffering repeated pancreatitis.

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Viral serology in haemodialysis outpatients What is reasonable to request?

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Dear Editor,

In the SEN (Spanish Society of Nephrology) Clinical Guidelines on Haemodialysis Centres, chapter 7 corresponding to the standardisation of criteria for the treatment of outpa-

tients, it is considered that Dialysis Units must have a procedure for admitting and transferring patients that establishes, amongst others, "the definition of acceptable and non-acceptable characteristics of the patients by the organisation and suitability criteria for admission."[1]

One of the most important aspects to monitor in patients who transfer from one centre to another as outpatients is their viral serology. Although this aspect is of maximum importance, many centres, in their excessive zeal, request that the viral serology of patients transferred to their centre is no more than one month old (this includes HCV, HBV and HIV.)

This attitude has several consequences. On one hand, it damages both the issuing centre -since a great number of them are haemodialysis centres that do not have the facilities to perform these tests urgently- and the patients themselves, since some have not been able to travel since they are not admitted for this reason. There are also unnecessary costs involved.

Centre guidelines recommend that the viral serology of patients transferring from one centre to another be no more than three months old.[1] In our opinion, centres should only request that the viral serology for haemodialysis patients does not surpass the standard monitoring period stated in the SEN virus guidelines and the guidelines for centres for stable haemodialysis patients.[3]

Both guides recommend that the HCV-Ab be performed every six months (recommendable) or every three months (desirable); the HB-Ag to be tested on a yearly basis in patients with HB Ac negative and HIV annually.

With respect to the HIV virus, the guidelines for action against viral diseases state: "All patients starting haemodialysis treatment must have a serology study performed for HIV to treat this disease. Furthermore, when a patient is permanently transferred from another Unit, they must be tested for this virus. Further serological studies are not required. However they may be considered on a six-monthly or yearly basis in patients who are at risk." It may be the case that the confusion originates in the recommendation that each patient starting haemodialysis and any patient being transferred to another Unit must be tested for HIV. There is a difference between a new patient, who is unknown, starting dialysis for the first time in any centre and a patient who is part of a chronic haemodialysis programme in a Unit with adequate serology monitoring, and who is probably in isolation, transferring to another centre as an outpatient. In the case of HIV, the last test performed in the year is probably sufficient. This virus also has low infectivity and the isolation of the patient is not required. Therefore, in theory, strict observation of the universal precaution measures which are obligatory in any Dialysis Unit should be adequate,[4-6] as well as the real cause of nosocomial infections.

In terms of determining HB-Ag, guidelines recommend annual tests for each haemodialysis patient (in particular, in those who do not respond to vaccine against HBV) and in all patients referred from another Unit, with particular reference to the vaccination times and Acute Units. It seems reasonable to admit a patient from another stable Unit, with an HB-Ag test carried out in the last three months or with HB-Ac, even if they do not HB-Ag. In such cases the serology is vital, since this requires strict isolation in independent Units. This is also the case with Ac against HCV. Guidelines recommend that these are determined at least every six months. The guidelines also indicate that it is desirable that this be determined every three months.

To conclude, in our opinion, viral tests requested for stable haemodialysis patients transferring to another centre for their holidays should not exceed the recommendations stipulated by the guidelines relating to virus monitoring. Having an analysis of the viral serology taken in the last month does not rule out the possibility of nosocomial transmission, since the patients may be in the window period, which may last up to six months following communication. Real prevention of viral infections in Haemodialysis Units is achieved by ensuring strict compliance with universal precautions in each patient undergoing dialysis in the Unit, regardless of whether they are positive or negative.

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