Tuberculous Peritonitis in Continuous Ambulatory Peritoneal Dialysis

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Dear Sir,

With interest we read the letter by Herrera et al. [1] about tuberculosis as a cause of peritonitis in patients undergoing continuous ambulatory peritoneal dialysis (CAPD) in the June issue of Nephron. In the light of a previous personal case and a review of 18 cases in the literature [2], we are prompted to make the following comments and remarks.

First of all, we are at one with the authors in stressing the importance of laparoscopic peritoneal cavity inspection and multiple guided biopsies in diagnosing tuberculous peritonitis as early as possible, without waiting for BK culture data, in patients presenting with unexplained lymphocytic peritonitis. It is indeed quite true that other kinds of infectious peritonitis (fungic or viral) may present lymphocytic cellularity. Tuberculous peritonitis must also be suspected in a prolonged course of ‘sterile’ peritonitis, including a predominance of neutrophils, that does not respond to the usual antibiotics. Peritoneal biopsy seems an interesting method of diagnosis for at least two reasons: it cannot only identify infectious agents, but can also exclude other diagnoses such as peritoneal carcinosis. However, polymerase chain reaction has nowadays to be discussed in such patients. This noninvasive method may certainly be helpful because it can lead to diagnosis within 3 days, as recently shown by Yap et al. [3]. However, the sensibility of this method needs to be pinpointed by further studies because of the dilution of Koch bacilli in effluent dialysis solution. A prompt diagnosis is indeed important in view of the poor prognosis: 7 out of the 18 patients reviewed died in the 4 months following diagnosis [2]. Earlier diagnosis and treatment could probably improve the patient survival rate.

Our second remark concerns the ‘best method’ to be used in maintenance dialysis. In spite of ultrafiltration loss as observed by Mallat and Brensilver [4] and ourselves [2], CAPD has been continued in at least 7 patients in the literature [2]. We decided to pursue CAPD in order to limit intestinal loop adherences, and we observed that CAPD functioned well over the next 3 years. From a therapeutic point of view, despite ethambutol dosage reduction (5 mg/kg BW/day), as recommended in end-stage renal failure [5], our own patient presented ocular toxicity, whose mechanism is dose-dependent. Rutsky and Rostands [6] also observed ocular toxicity in 2 patients out of 14 with chronic renal failure at a dose of 5-6 mg/kg BW/day. Thus, care must be exercised in using ethambutol because of the reduction of the elimination rate, and such patients need regular ocular examination with the aim of reducing the risk of permanent ocular sequelae.
Finally, it is interesting to recall that about 50% of M. tuberculosis peritonitis occurred in the 1st year of CAPD treatment [2], which suggests the possible revealing role of peritoneal dialysis in a previously silent BK infection.

References