

## **MULTIBACTERIAL PERITONITIS IN PERITONEAL DIALYSIS PATIENTS**

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Nowadays bacterial peritonitis is still the Achilles' heel of peritoneal dialysis treatment and remains important cause of morbidity and mortality. Given the increasing number of elderly patients reaching end-stage renal disease and undergoing regular peritoneal dialysis treatment, the microbiological pattern of germs identified in peritoneal liquid culture has been changing.

Between the 1<sup>st</sup> January 2002 and the 30<sup>th</sup> of June 2008 we admitted to peritoneal dialysis treatment 146 patients (average 58 years of age). 46 patients presented 73 episodes of clinical peritonitis and they were treated as best guide lines recommend. 5 out 46 patients (11%) presented in the culture of the first collected liquid peritoneal a multimicrobial growth characterized by mixed aerobic-anaerobic-fungi peritoneal flora. Mortality was extremely high and all patients died in spite of multiple antibiotic therapy. The incidence of gram positive peritonitis was 54% (25 out 46 pt) and the most common organism was *Stafilococcus Epidermidis*. The incidence of gram negative peritonitis resulted to be 35% (16 out 46 pt) mostly due to *Klebsiella Pneumoniae* and *Escherichia Coli*. Gram positive and gram negative peritonitis showed a low mortality incidence respectively of 0.02% and 0.04%.

We stress that the incidence of multimicrobial peritonitis could greatly increase in elderly patients on peritoneal dialysis treatment probably in consequence of diverticulosis of colon and lower immune response. A rigid selection of patients admitted to peritoneal dialysis therapy and extreme accuracy in the training need to reduce the risk of multimicrobial peritonitis and mortality.