## Burkholderia Cepacia Peritonitis in Ambulatory Peritoneal Dialysis

VM dos Santos

The Editor

Sir.

I have recently read two interesting articles, by Apostolovic *et al* and Yap *et al*, about infections by *Burkholderia cepacia* (*B cepacia*) in chronic patients undergoing peritoneal dialysis (1, 2).

For the first time in literature, Apostolovic *et al* described the case study of repeated peritonitis by *B cepacia* affecting a patient on continuous ambulatory peritoneal dialysis (1). The authors emphasized the current rarity of this condition in the out-patient environment, and the good outcome of peritonitis in response to antibiotic treatment without catheter removal. Moreover, the article's discussion can enhance the awareness of general practitioners and nephrologists about the possible role of rare, opportunistic agents in chronic renal patients (1).

Yap *et al* reviewed chronic renal patients in peritoneal dialysis, with exit-site infection related or not to tunnel tract or peritoneal involvement by *B cepacia*. Among 22 of the studied individuals, 36.4% and 31.8%, respectively, had immunosuppression and previous skin changes; both tunnel-tract and peritoneal infection occurred in 13.6% of the patients. Antibiotics alone controlled 68.2% of the infections, but 31.8% required catheter removal (2).

Burkholderia cepacia was sensitive to ceftazidime or piperacillin/tazobactam (95.5%) and piperacillin (90.5%), and was resistant to aminoglycosides (80–100%) and ticarcillin/clavulanate (91%). The authors highlighted the high transmissibility and risk of recurrence, the resistance to multiple antibiotics and the need for catheter removal in a third of the reviewed patients (2).

The articles commented on have contributed to enhance the knowledge of healthcare workers pertaining to multidisciplinary dialysis teams about these *B cepacia* infections. Notwithstanding, I would like to add some comments about a Brazilian report focussing on *B cepacia* endocarditis related to an incidentally detected intracardiac fragment of catheter (3).

The patient had chronic renal disease was on haemodialysis eight years before her renal transplant, she had circulatory shock and a central catheter was peripherally inserted. Azathioprine, tacrolimus, and prednisone were employed after transplantation, and she developed endocarditis with *B cepacia* in association with the intracardiac foreign body (3). The catheter fragment was removed by cardiotomy, the cultured infectious agent was sensitive to sulfamethoxazole and trimethoprim and the infection was successfully controlled. The authors emphasized the growing number of infections by *B cepacia*, (1–3); and the risk of endocarditis in immunosuppressed people, mainly the group of renal transplant patients (3).

The articles herein commented about conditions scarcely reported which might enhance the suspicion index, which would decrease the number of under-diagnosis and under- reported cases.

**Keywords:** *Burkholderia cepacia*, endocarditis, peritoneal dialysis, peritonitis

VM dos Santos

From: Department of Armed Forces Hospital, Internal Medicine and Catholic University of Brasília. Brasília-DF, Brazil.

Corresponding: Professor VM dos Santos, Departamento de Medicina Interna do Hospital das Forças Armadas e Universidade Católica. Estrada do Contorno do Bosque s/n, Cruzeiro Novo, CEP 70630-900. Brasília-DF, Brazil, 55-61 32330812. Fax: 55-61 32331599. Email: vitorinomodesto@gmail.com

## REFERENCES

- Apostolovic BL, Velickovic-Rodovanovic RM, Andjelkovic-Apostolovic MR, Cvtkovic TP, Dinic MM, Radivojevic JD. Repeated Burkholderia cepacia peritonitis in a patient undergoing continuous ambulatory peritoneal dialysis. West Indian Med J 2015; 64: 288–90.
- Yap DY, Chan JF, Yip T, Mok MMY, Kwan L, Lo WK et al. Burkholderia cepacia exit-site infection in peritoneal dialysis patients – clinical characteristics and treatment outcomes. Perit Dial Int 2015.
- Falcâo Pedrosa Costa A, Castelo Branco Cavalcanti F, Modesto dos Santos V. Endocarditis due to Burkholderia cepacia and an intracardiac foreign body in a renal transplant patient. Rev Port Cardiol 2014; 33: e1-4.