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Letter to the Editor

A case report of urinary tract infection from *Pseudoglutamicibacter cumminsii* in an immunosuppressed patient

Dear editor,

Pseudoglutamicibacter cumminsii is an aerobic, catalase-positive, Grampositive coccobacillus commonly found in soil. Case presentations in literature are associated with infection from this pathogen or related species within it, such are: Arthrobactercreatinolyticus or Arthrobacter woluwensis, though these are currently limited [1–4]. Moreover, limited cases of P. cumminsii are associated with urinary tract infection (UTI) [1].

A 17-year-old female patient was diagnosed with myasthenia gravis for more than two years. She was under treatment with 10 mg/day corticotherapy for more than one year. She complained of recurrent UTI and was treated with antibiotics and cranberry tea, though she did nothave any specific signs of UTI except increased urinary frequency. After the incubation time, the last urine culture samples resulted with P. cumminsii, with a pure culture count of >100,000 CFU/mL in a yellowish colony. The reported susceptibility profile was as follows: susceptible to amikacin, ceftriaxone, cefotaxime, ciprofloxacin, norfloxacine, levofloxacine, and piperacillin; and resistant to amoxicillin/clavulanic acid, cefaclor, clarithromycin, cefepime, nitrofurantoin, nalidixic acid, Bactrim (sulfamethoxazole and trimethoprim), and penicillins. Identification of the pathogen was performed via mass spectrometry using MALDI-TOF (Bruker®, Bremen, Germany). P. cumminsii was obtained with a score of 1.65. Based on the myasthenia gravis treatment guideline, the patient was allowed to use only the following: cefalosporins, vancomycin, metronidazole, nitrofurantoine, and some anti-tubercular drugs. Thus, based on those combinations, we treated the patient with ceftriaxone 2g/ day for seven days. The aim of this letter is to present this case report on an immunosuppressed young female patient who presented with UTI caused by P.cumminsii.

In conclusion, a good-quality urine specimen is vital in making the diagnosis. Nowadays, it is well-known that the spectrum of UTI is wideranging, from the most common pathogens, such as *Escherichia coli, Enterococcus, Klebsiella, Pseudomonas,* and *Staphylococcus,* to other less frequent pathogens described in the literature [5]. Therefore, physicians need to be careful in diagnosing and treatment UTI. The isolation of P.cumminsii was a fortuity for us. In Albania, it is the first isolation of this pathogen from urine.

Declaration of competing interest

Authors declare no conflicts of interest.

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Edmond Puca* Service of Infection Diseases, University Hospital Center, Tirane, Albania

Markelian Koci

Service of Microbiology, Intermedika Laboratory, Tirane, Albania

Entela Puca

Service of Endocrinology, American Hospital, Tirane, Albania Western Balkans University, Tirane, Albania

Najada Como

Service of Infection Diseases, University Hospital Center, Tirane, Albania

* Corresponding author. Service of Infection Diseases, University
Hospital Center, Rruga e Dibres, No 370, Tirane, Albania.

E-mail address: edmond puca@yahoo.com (E. Puca).