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Letter to the Editor

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Unusual isolation of *Pseudoglutamicibacter cumminsii* in urine culture

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Sir,

Pseudoglutamicibacter cumminsii is an aerobic, catalase-positive, Gram-positive coccobacillus commonly found in soil. Recently, a change has been made in the taxonomy of this species, which was previously classified as *Arthrobacter cumminsii* [1]. The literature associated with urinary tract infection (UTI) is rare [2,3], although other cases of infections caused by related species within this genus, such as bacteraemia caused by *A. creatinolyticus* [4] or endocarditis caused by *A. woluwensis* [5], have been reported.

A 34-year-old woman with no personal history of interest visited her primary care medical centre with persistent urinary symptoms. She was diagnosed with cystitis and was prescribed Fosfomycin 3 g oral solution, two doses. Two weeks later, she returned to the health centre reporting continued urinary symptoms, without episodes of fever.

The patient was asked to send a urine sample for culture in the microbiology laboratory. The sample was inoculated in CPSO chromogenic medium (Biomerieux®, Marcy L'Etoile, France) and incubated for 24 hours in a 37º atmosphere. After the incubation time, a pure culture count of >100,000 CFU/ml of a yellowish colony was observed (Figure 1).

Identification of the microorganism was performed by mass spectrometry, MALDI-TOF (Bruker®, Bremen, Germany). *Pseudoglutamicibacter cumminsii* was obtained with a score of 1.65. The identification was confirmed by using 16S rRNA gene sequence (GenBank accession number: MZ293797). Antibiotic susceptibility was tested by disc diffusion and *Corynebacterium* cut-off points in EUCAST (European Committee on Antimicrobial Susceptibility Testing) 2021 were taken as a reference for antibiogram interpretation. The susceptibility profile reported was as follows: susceptible to imipenem, linezolid, rifampicin, tetracycline and vancomycin, and resistant to ciprofloxacin, clindamycin, erythromycin, gentamicin, levofloxacin and penicillin.

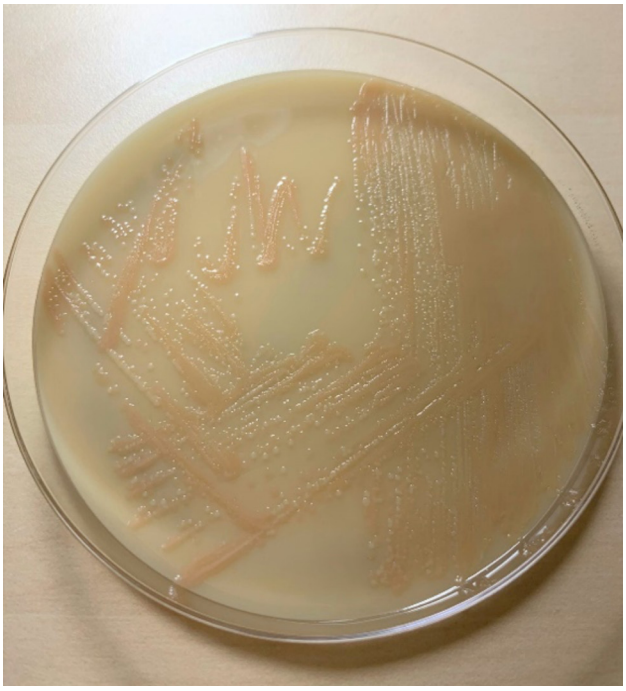

Figure 1 | **Colonies of *P. cumminsii* grown in CPSO® chromogenic agar (Biomerieux®)**

Subsequently, the patient was treated with doxycycline 100 mg for 7 days with successful results. No new post-treatment control sample was sent.

Few reports have associated this microorganism to urinary tract infection [2,3]. However, the etiology of UTI's can be very wide ranging, from the most common pathogens such as *Es-*

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cherichia coli, *Proteus mirabilis* or *Klebsiella pneumoniae*, to other less frequent pathogens described in the literature [6]. Accurate identification methods and antibiotic susceptibility constitute a fundamental tool in the diagnosis of urinary tract infections caused by underdiagnosed emerging pathogens.

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CONFLICTS OF INTEREST

The authors declare no conflicts of interest.

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