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Pan-drug-resistant and biofilm-producing strain of *Burkholderia pseudomallei*: first report of melioidosis from a diabetic patient in Yogyakarta, Indonesia [Letter]

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International Medical Case Reports Journal

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Dear Editor

We are writing, on behalf of the International Melioidosis Society Committee, as a group of researchers and clinicians with longstanding experience of melioidosis and *Burkholderia pseudomallei* as we have some concerns about the above paper that was published in your journal recently.¹

Although we believe that melioidosis is undoubtedly being under-diagnosed in Indonesia,^{2,3} we are not convinced that the isolate in this case is *B.pseudomallei* based on the information provided by the authors. Although it is difficult to be certain from the photographs in Figure 2, the colonies do not appear typical of the species to the microbiologists amongst us, who have seen several thousand isolates of *B.pseudomallei* over the past 30 years. Furthermore, the authors do not report whether the isolate was oxidase positive or negative. We believe that more comprehensive methods of confirming the identity, particularly genomic analysis, should have been undertaken before publishing the case.⁴ Unfortunately, the post-amplification 16s analysis described in the paper might not have been able to distinguish between *B.pseudomallei* and other *Burkholderia* species (particularly *B.thailandensis* and several as-yet-uncharacterized *Burkholderia* spp.), and we would have recommended additional testing, for example, multilocus sequence typing and PCR for the TTS1 gene at least.

Furthermore, the resistance pattern reported, particularly to carbapenems and ceftazidime, would be extremely unusual, especially in a patient who had not previously received these antibiotics. Ideally, this should have been confirmed by a reference laboratory or by measuring minimum inhibitory concentrations (eg, by broth dilution or gradient diffusion). There are as yet no internationally accepted criteria for interpreting zone diameters for *B.pseudomallei* and, in our experience, whilst disk diffusion methods are reliable for determining the susceptibility of *B.pseudomallei* to most agents except co-trimoxazole,⁵ they require very careful quality control. Thus, even if this isolate is indeed *B.pseudomallei*, it remains possible that methodological issues may have resulted in misinterpretation of the susceptibility results. Determination of the genetic basis for the resistance would also be valuable.

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If indeed this was a case of melioidosis caused by a multidrug-resistant isolate, then it is important that as much information as possible about it is made available to the scientific community. We have offered to help the authors to achieve this, but have not received a response. We, therefore, feel that we have a duty to the scientific community to raise our concerns.

Disclosure

The authors report no conflicts of interest in this communication.

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