Increasing Melioidosis Cases in India

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With great interest, we read the article entitled “Melioidosis: A 5-year Review from a Single Institution in Pondicherry” by Sharma and Viswanathan.¹ In their retrospective study of case records, only 20 patients out of 34 proven melioidosis were traced from the medical records. Twelve of them have died in hospital.¹

Melioidosis is a life-threatening fatal disease but potentially curable. We can decrease the mortality rate to less than 10% with faster bacterial confirmation, appropriate antibiotics, and good hospital care.¹ I searched PubMed with the keyword “melioidosis” and “India”. Over the previous decade in India, as per PubMed data, annual reporting has increased and comprises 70% of total publications from India on melioidosis. Over 1,550 cases (over 90% of the total over 1,700 cases published so far from India about 1,700). The highest number of annual cases (over 500 cases) was already reported in 2021. Melioidosis is common in tropical climates with hot, humid, and higher rainfall and wind. The bacteria usually persist in the soil. Patients with uncontrolled diabetes mellitus, prolonged glucocorticoid therapy, and chronic liver or renal disease are more prone to developing melioidosis.³ Melioidosis is much more commoner than ever believed to be diagnosed in tropical countries like India, the diabetic capital of the world. This disease is grossly underreported in the tropical regions in India, probably due to a lack of awareness and multiple symptoms that imitate other conditions without specific identifying features. Even if diagnosed at times, it is already too late or after death only.

Authors diagnosed the melioidosis by culture method only. The culture used to take a longer time. Early and rapid diagnosis by antigen detection using lateral flow immunonassay directly from various clinical samples⁴ could have prevented higher death (12 of 20 patients) by early appropriate antibiotics administration. This easy method might be adapted when there is clinical suspicion, and a culture report is likely to be delayed to confirm the diagnosis.⁴

The signs and symptoms of melioidosis mimic other diseases like tuberculosis, used to delay the diagnosis and ultimately management of melioidosis. The presence of common broad-based signs and symptoms can share with other diseases without a clue, resembling other conditions, often delaying melioidosis diagnosis and management. Melioidosis is also called “the great mimicker” of tuberculosis and other diseases. There is an urgent need to create awareness among clinicians and microbiologists, capacity building of the microbiology laboratories, and a national melioidosis registry. Lack of experience of such diseases, without clinical clues or familiarity with the disease, possibly was the reason for rare reporting.⁵

The importance of awareness and knowledge of this disease entity is of great importance. The treatment regimen consists of early aggressive antibiotics for weeks and is followed by prolonged maintenance, which is quite different from other acute bacterial diseases. Many patients die due to non-diagnosis, delayed diagnosis, or inadequate and incorrect treatment. Many of these patients are advised of antitubercular drugs. Some other patients are treated with high-end antibacterial combinations like piperacillin and tazobactam. However, these patients having melioidosis require a prolonged course of antibacterial treatment with specific drugs (like meropenem or ceftazidime). Hence, increasing awareness among clinicians and microbiologists is essential for this occasional reported and fatal disease.

REFERENCES