

Clinical–radiological features and diagnostic modalities for mediastinal melioidosis

ABSTRACT

Melioidosis is a potentially life-threatening infection caused by the Gram-negative bacillus *Burkholderia pseudomallei*. Mediastinal melioidosis has a range of clinical presentations, making it difficult to diagnose: we therefore reviewed the evidence on the clinical characteristics, radiological features and invasive diagnostic modalities or interventions. An electronic search was conducted on three databases (PubMed, SCOPUS, Google Scholar) from November to December 2022. The initial search yielded 120 results, of which 34 studies met the inclusion criteria, but only 31 full-texts were retrievable. Among these, 4 were cohort studies, 26 case reports or series and 1 a conference abstract. The four main themes covered were mediastinal melioidosis as a diagnostic dilemma, unexpected complications, invasive interventions or an accompanying thoracic feature. Radiological manifestations included matting, necrosis and abscess-like collection. Severe presentations of mediastinal melioidosis included superior vena cava obstruction, sinus tract formation and pericardial tamponade. Transbronchial needle aspiration was the most common invasive diagnostic modality. Further research is needed to understand the relationship between the thoracic features of melioidosis on patient prognosis, its relationship to melioidosis transmission and potential preventive measures.