



Charles Darwin University

Melioidosis mimicking primary lung malignancy with superior vena cava obstruction

Wilson, Malcolm; Smith, Simon; Brown, James; Hanson, Joshua

Published in:
IDCases

DOI:
[10.1016/j.idcr.2016.09.014](https://doi.org/10.1016/j.idcr.2016.09.014)

Published: 01/01/2016

Document Version
Publisher's PDF, also known as Version of record

[Link to publication](#)

Citation for published version (APA):

Wilson, M., Smith, S., Brown, J., & Hanson, J. (2016). Melioidosis mimicking primary lung malignancy with superior vena cava obstruction. *IDCases*, 6, 58-59. <https://doi.org/10.1016/j.idcr.2016.09.014>

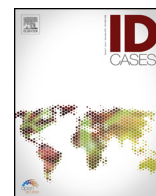
General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.



Case Illustrated

Melioidosis mimicking primary lung malignancy with superior vena cava obstruction



Malcolm Wilson, MBBS, Dr^{a,*}, Simon Smith, FRACP, Dr^b, James Brown, FRACP, Dr^c,
Josh Hanson, FRACP, Dr^d

^a Department of Respiratory Medicine, Cairns Hospital, Level 5, Block B, 165 The Esplanade, Cairns, Queensland, 4870, Australia

^b Department of Medicine, Cairns Hospital, Cairns, Australia, and College of Medicine and Dentistry, James Cook University Cairns Campus, Cairns, Australia

^c Department of Respiratory Medicine, Cairns Hospital, Cairns, Australia

^d Department of Medicine, Cairns Hospital, Cairns, and Department of Global Health, Menzies School of Health Research, Darwin, Australia

ARTICLE INFO

Article history:

Received 22 September 2016

Received in revised form 24 September 2016

Accepted 24 September 2016

A 59-year-old male Torres Strait Islander presented with reduced exercise tolerance, night sweats and weight loss of twenty kilograms. He was a recent ex-smoker with a forty-four pack year history and type II diabetes mellitus. Physical examination of his chest was unremarkable, but both internal jugular veins were engorged and non-pulsatile. Imaging demonstrated bulky mediastinal lymphadenopathy partially obstructing his superior vena cava (SVC) and causing partial collapse of the right upper lobe (Fig. 1A). The history, clinical findings and imaging were consistent with a diagnosis of SVC obstruction secondary to a lung malignancy. He was admitted to our hospital and commenced on high dose dexamethasone. In hospital, his glycemic control deteriorated and, although his blood pressure was 133/88 mmHg on admission, six days later this fell abruptly to 80/40 mmHg necessitating vasopressor support. Concurrent blood cultures grew *Burkholderia pseudomallei* and repeat imaging showed enlargement of the mediastinal adenopathy and the development of a gas-filled collection between the trachea and aorta (Fig. 1B). Intravenous meropenem was commenced and his condition improved. After three weeks the meropenem was changed to continuous intravenous ceftazidime infusion to permit outpatient management. After a total of four weeks of intravenous antimicrobials he received three months of oral trimethoprim/sulphamethoxazole with folic acid. Lymph node biopsy performed one month after his initial presentation revealed only reactive lymphoid material with no evidence of malignant cells. The mediastinal lymphadenopathy

had resolved on imaging performed at completion of antimicrobial treatment (Fig. 1C).

Melioidosis is a tropical infection endemic in northern Australia, Asia and South America [1]. The disease most commonly presents with a pneumonic illness. It can, however, afflict almost any organ with the skin, liver, spleen and prostate often affected. Most cases present acutely with a septicemic illness but the disease may have a more subacute presentation and mimic other conditions such as malignancy or tuberculosis [2]. Acute presentations are particularly common in individuals with diabetes mellitus, renal impairment or hazardous alcohol consumption, but the disease can also be unmasked by exogenous immunosuppression and may be rapidly fatal without appropriate antimicrobial therapy [3].

Instances of melioidosis presenting with isolated mediastinal lymphadenopathy in the absence of pneumonia are rarely described in the literature [2,3]. Although such a presentation would more commonly be due to a sinister diagnosis – such as malignancy – melioidosis should be considered, in the appropriate clinical setting, as early recognition and treatment could be life-saving.

Conflicts of interest

None.

Contributorship and competing interest statement

The authors confirm that the material within this manuscript is original, and has not been submitted for publication elsewhere.

* Corresponding author.

E-mail address: malcolm.wilson@health.qld.gov.au (M. Wilson).

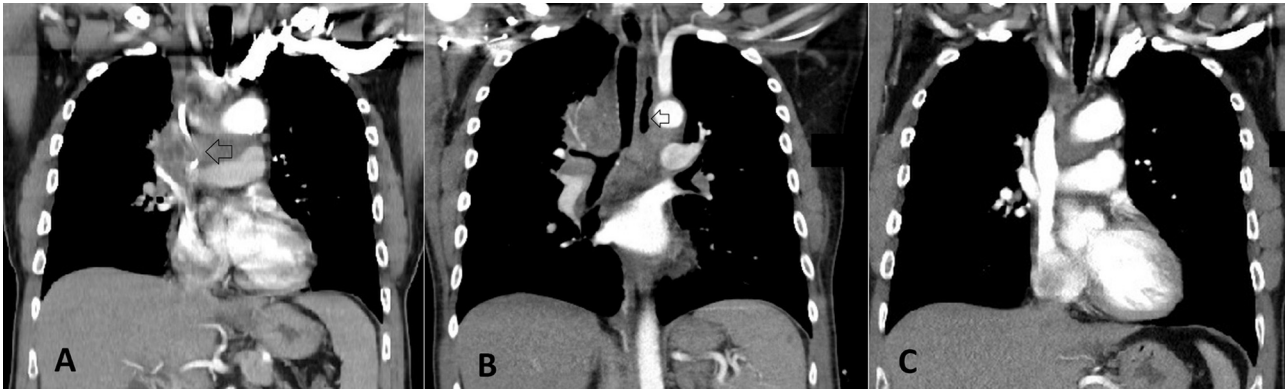


Fig. 1. A. Coronal images demonstrating mediastinal lymphadenopathy partially obstructing the SVC (arrow). B. Coronal images showing a gas filled collection within the mediastinum (arrow). C. Resolution of lymphadenopathy and SVC obstruction.

All authors have contributed equally to – and approve – the manuscript.

None of the authors have any relationships or receive any funding support which might be perceived as constituting a conflict of interest.

Written informed consent for this manuscript was obtained from the patient. The corresponding author has retained a copy of this.

References

- [1] Limmathurotsakul D, Golding N, Dance DA, Messina JP, Pigott DM, Moyes CL, et al. Predicted global distribution of *Burkholderia pseudomallei* and burden of melioidosis. *Nat Microbiol* 2016;1(1):1–13.
- [2] Chan HP, Yip HS. Mediastinal lymphadenopathy: melioidosis mimicking tuberculosis. *Trop Med Health* 2015;43(2):93–4.
- [3] Currie BJ, Ward L, Cheng AC. The epidemiology and clinical spectrum of melioidosis: 540 cases from the 20 year Darwin prospective study. *PLoS Negl Trop Dis* 2010;4:1–11 11, article e900.