

# Accepted Manuscript

Management of a hospital outbreak of extensively drug-resistant *Acinetobacter baumannii* using a multimodal intervention including daily chlorhexidine baths

A.P. Gray, R. Allard, R. Paré, T. Tannenbaum, B. Lefebvre, S. Lévesque, M. Mulvey, L. Maalouf, S. Perna, Y. Longtin



PII: S0195-6701(16)00005-0

DOI: [10.1016/j.jhin.2015.12.013](https://doi.org/10.1016/j.jhin.2015.12.013)

Reference: YJHIN 4713

To appear in: *Journal of Hospital Infection*

Received Date: 16 October 2015

Accepted Date: 11 December 2015

Please cite this article as: Gray AP, Allard R, Paré R, Tannenbaum T, Lefebvre B, Lévesque S, Mulvey M, Maalouf L, Perna S, Longtin Y, Management of a hospital outbreak of extensively drug-resistant *Acinetobacter baumannii* using a multimodal intervention including daily chlorhexidine baths, *Journal of Hospital Infection* (2016), doi: 10.1016/j.jhin.2015.12.013.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

A.P. Gray *et al.*

**Management of a hospital outbreak of extensively drug-resistant *Acinetobacter baumannii* using a multimodal intervention including daily chlorhexidine baths**

A.P. Gray<sup>a</sup>, R. Allard<sup>a,b</sup>, R. Paré<sup>b</sup>, T. Tannenbaum<sup>a,b</sup>, B. Lefebvre<sup>c</sup>, S. Lévesque<sup>c</sup>, M. Mulvey<sup>d</sup>, L. Maalouf<sup>e</sup>, S. Perna<sup>e</sup>, Y. Longtin<sup>a,e,\*</sup>

<sup>a</sup>*Faculty of Medicine, McGill University, Montreal, Canada*

<sup>b</sup>*Montreal Public Health Department, Montreal, Canada*

<sup>c</sup>*Laboratoire de santé publique du Québec, Institut national de santé publique du Québec, Sainte-Anne-de-Bellevue, Québec, Canada*

<sup>d</sup>*National Microbiology Laboratory, Winnipeg, Canada*

<sup>e</sup>*Infection Prevention and Control Unit, Jewish General Hospital–SMBD, Montreal, Canada*

---

\*Corresponding author. Address: Chair, Infection Prevention and Control Unit, Jewish General Hospital – SMBD, 3755 Côte-Sainte-Catherine Road, Room E-0057, Montreal, QC H3T 1E2, Canada. Tel.: +1 (514) 340-8222 ext. 8294.

*E-mail address:* yves.longtin@mcgill.ca (Y. Longtin).

**SUMMARY**

**Background:** Extensively drug-resistant *Acinetobacter baumannii* (XDR-Ab) is an increasingly important cause of healthcare-associated infection. Uncertainties remain concerning optimal control measures for healthcare-associated outbreaks.

**Aim:** To describe the epidemiology and control of an XDR-Ab outbreak that involved multiple units of a large hospital from March 2012 to January 2014.

**Methods:** Case-finding included screening of rectum, groin, throat, nose, wounds, iatrogenic portals of entry, and catheterized sites. Antimicrobial susceptibility was evaluated by disk diffusion and E-test. Resistance genes were detected by polymerase chain reaction. Clonality was assessed by pulsed-field gel electrophoresis. Charts of cases were reviewed to identify risk factors for invasive infection. Control measures included isolation and cohorting of cases, hand hygiene reinforcement, environmental decontamination, and source control with daily baths using wipes pre-impregnated with chlorhexidine gluconate.

**Findings:** A single clonal strain of XDR-Ab colonized or infected 29 patients. Five patients died of XDR-Ab bacteraemia. Transmission occurred primarily on two wards. Colonization was detected at all anatomical screening sites; only 57% (16/28) of cases were rectal carriers.

Advanced malignancy was a risk factor for bacteraemia (relative risk: 5.8; 95% confidence

Download English Version:

<https://daneshyari.com/en/article/6122051>

Download Persian Version:

<https://daneshyari.com/article/6122051>

[Daneshyari.com](https://daneshyari.com)