

Drug-resistant urinary tract infections spreading worldwide

December 28 2009

A sudden worldwide increase in an antibiotic-resistant bacterium is cause for concern, according to a review in *J1000 Medicine Reports*.

Faculty of 1000 member Dr Johann Pitout, of the Department of [Pathology](#) and Laboratory Medicine, University of Calgary, urges the medical community to monitor the spread of a multi-drug resistant bacterium before it becomes necessary to use more powerful [antibiotics](#) as a first response.

Extended-spectrum β -lactamases (ESBLs) are bacterially-produced enzymes that confer resistance to penicillin-type antibiotics. ESBLs have been commonly linked to nosocomial infections, which are generally treated with intravenously-administered antibiotics such as the carbapenems.

However, in recent years there has been a drastic increase in community-acquired infections, caused by a single strain of ESBL-producing *E. coli*. Dr Pitout suggests that the rapid spread of this particular strain is due, at least in part, to international travel through high-risk areas such as the Indian subcontinent.

Using carbapenems as the first response to such infections increases the risk of inducing resistance to them in the community, nullifying some of our most powerful anti-bacterial strategies. Dr Pitout recommends that the medical community should use existing methods to identify infections caused by ESBL-producing bacteria, and empirically test the

efficacy of other antibiotics in treating community-acquired infections.

Dr Pitout concludes, "If this emerging public health threat is ignored ... the medical community may be forced to use the carbapenems as the first choice for the empirical treatment of serious [community-acquired UTIs]."

Provided by Faculty of 1000: Biology and Medicine

Citation: Drug-resistant urinary tract infections spreading worldwide (2009, December 28)
retrieved 18 April 2024 from
<https://medicalxpress.com/news/2009-12-drug-resistant-urinary-tract-infections-worldwide.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.