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'Last resort' antibiotics increasingly used to fight multidrug-resistant bugs

May 16 2012

Multidrug-resistant pathogens are becoming more frequent, and the few "last resort" treatments available for infections with these bacteria have also shown an increase in use in recent years, according to a study published May 16 in the open access journal *PLoS ONE*.

The authors, led by Makoto Jones of the Veterans Affairs Salt Lake City Health Care System, investigated the use of two such antibiotics, polymyxins and tigecycline, in 127 Veterans Affairs medical centers between 2005 and 2010. They found that the overall use of these treatments was quite low, but that it did increase over the course of the study period. While this is the first study assessing use of these drugs in the United States on a large scale the trend is almost certainly not limited to the VA.

They also found that just eight facilities accounted for three quarters of all polymyxin use, and 26 facilities accounted for three quarters of all tigecycline use. Dr. Jones commented "The use of polymyxins, a class of relatively toxic antibiotics, has been increasing over time and appears to be a marker of very resistant bacteria. To address this potential harbinger of a growing epidemic, a clear strategy of infection control, antibiotic development, and antibiotic stewardship will be necessary."

More information: Huttner B, Jones M, Rubin MA, Neuhauser MM, Gundlapalli A, et al. (2012) Drugs of Last Resort? The Use of Polymyxins and Tigecycline at US Veterans Affairs Medical Centers, 2005. *PLoS ONE* 7(5): e36649. doi:10.1371/journal.pone.0036649