

Free fatty acids may be as effective as antibiotics in treating catheter infections

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Researchers at Rhode Island Hospital, Veterans Affairs Medical Center in Providence and University of Rhode Island have found that a free fatty acid, made up of compounds similar to those naturally made in the body, may be as effective at fighting certain infections as antibiotics. The study is published online in advance of print in the *Journal of Antimicrobial Chemotherapy*.

"More and more bacteria are developing resistance to commonly used antibiotics," said Leonard Mermel, D.O., medical director of the department of epidemiology and [infection](#) control at Rhode Island Hospital. "This study shows that in some cases, we may have an alternative to antibiotics in preventing and treating infections caused by intravenous catheters."

The researchers studied the use of specific antimicrobial lock solutions for the treatment of catheter-related [bloodstream infections](#) and found that in laboratory experiments, the treatments were equally, if not more, effective than antibiotics in treating catheter infections. The prototype used in this study, ML9-X10, is a novel, free fatty acid catheter lock solution that is under development.

"Some [free fatty acids](#) have the ability to fight bacteria, yeast and viruses," said Kerry LaPlante PharmD, of the University of Rhode Island and Veterans Affairs Medical Center in Providence. "These unique compounds may provide an alternative to traditional antibiotics in preventing and treating the many intravenous catheter infections that

occur each year in the U.S."

Catheter-related bloodstream infections, such as those due to *Staphylococcus*, are a common cause of health care-associated infections. Such infections increase hospital length of stay, overall treatment costs, and are associated with morbidity and mortality.

Provided by Lifespan

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