
Name *	Michelle Formanek
---------------	-------------------

Email *	michelle-formanek@uiowa.edu
----------------	--

Educational Level *	Masters Candidate
----------------------------	-------------------

If Selected Other	
--------------------------	--

College *	College of Public Health
------------------	--------------------------

Department *	Epidemiology
---------------------	--------------

Title of Research *	Gentamicin–Collagen Sponge Use Reduces Risk of Wound Infection Following Surgery: A Meta–Analysis
----------------------------	---

Other Authors *	<p>Eli Perencevich MD, MS (Carver College of Medicine, University of Iowa, Iowa City, IA; Center for Comprehensive Access and Delivery Research and Evaluation VA Health Care System, Iowa City, IA)</p> <p>Loreen Herwaldt MD (Carver College of Medicine, University of Iowa, Iowa City, IA; Center for Comprehensive Access and Delivery Research and Evaluation VA Health Care System, Iowa City, IA)</p> <p>Marin L. Schweizer PhD (College of Public Health, University of Iowa, Iowa City, IA; Carver College of Medicine, University of Iowa, Iowa City, IA; Center for Comprehensive Access and Delivery Research and Evaluation VA Health Care System, Iowa City, IA)</p>
------------------------	---

Introduction & Purpose *	<p>BACKGROUND: Despite routine use of prophylactic antibiotics, surgical site infections continue to be associated with significant morbidity following various types of surgery. Studies are conflicted as to whether local application of a gentamicin–collagen sponge reduces the number of surgical site infections. However, these studies often only assess sponge use in one specific type of surgery. The general effect of sponge use among many different types of surgery is unknown.</p>
-------------------------------------	--

Experimental Design *	<p>METHODS: PUBMED and CINAHL databases were searched through January 2012 for articles with keywords related to gentamicin–collagen sponge use and surgical site infection. After reviewing 714 article abstracts and 25 articles in detail, we pooled odds ratios from 18 independent study populations that assessed the association between prophylactic gentamicin–collagen sponge use and surgical site infections</p>
------------------------------	--

Results *	<p>RESULTS: When all studies were pooled in a random effects model, a significant protective effect was seen between prophylactic use of a gentamicin–collagen sponge and surgical site infection (pooled OR: 0.41; 95% confidence interval [CI]: 0.28, 0.62; n=21). When the analyses were stratified by surgery type, a significant protective effect was observed in both colorectal (pooled OR: 0.33; 95% CI: 0.15, 0.74; n=9) and cardiac (pooled OR: 0.52; 95% CI: 0.35, 0.75; n=6) surgeries.</p>
------------------	--

Conclusions *	<p>CONCLUSION: The use of gentamicin–collagen sponges is associated with reduced risk of wound infection following surgery. To our knowledge, this is the first meta–analysis to assess this association among different types of surgery.</p>
----------------------	--

Created
12 Mar 2012
12:25:29 PM

PUBLIC