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# Correspondence, Re: "The Impact of a Reported Penicillin Allergy on Surgical Site Infection Risk"

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# Correspondence, Re: "The Impact of a Reported Penicillin Allergy on Surgical Site Infection Risk"

Alon Vaisman, MD[1], Janine McCready, MD[2], Jeff Powis, MD, MSc[2]

[1]Corresponding Author:
Alon Vaisman, MD, FRCPC
13EN215A - 200 Elizabeth Street
Division of Infectious Diseases
University Health Network
Toronto, ON
M5G 2C4
alon.vaisman@utoronto.ca
Phone: 416-340-4059
Fax: 416-595-5826

[2]Division of Infectious Diseases;
Michael Garron Hospital, Toronto East Health Network
825 Coxwell Ave
Toronto, ON
M4C 3E7

Alternate Author:
Jeff Powis, MD, FRCP, MSc
Director, Antimicrobial Stewardship Program and Infection Prevention and Control
Michael Garron Hospital, Toronto East Health Network
Assistant Professor, Department of Medicine, University of Toronto
jpowi@tehn.ca
Phone: 416-469-6252
Fax: 416-469-6253

We commend Blumenthal et al.[1] for their study demonstrating that self-reported beta-lactam allergies are associated with poorer outcomes in the perioperative setting. This work adds to the growing literature showing the harms secondary to the use of alternative second-line therapies, which are often broader, costlier, more toxic, and less effective [2,3].

Blumenthal et al. also described several approaches to verifying the unreliable self-reported beta-lactam allergies in the perioperative setting, including routine skin testing and specialist consultation and exposure to test doses of cefazolin [4,5]. Unfortunately, these resources are not available expeditiously in many healthcare centers. We would like to highlight an additional method to help de-label inappropriate beta-lactam allergies that is available to all clinicians – that of using in-depth history screening [6]. At our site, each patient presenting to the pre-operative clinic with a reported beta-lactam allergy underwent a brief assessment by a nurse or pharmacist to understand the nature, timing, and precise exposure eliciting the reported allergy. Each assessment was reviewed with an Infectious Diseases physician and deemed safe to proceed with beta-lactam prophylaxis if they did not describe a history of Type I/IgE mediated reaction or other severe reactions. Antibiotic prophylaxis orders (with approval by the surgical team) were scheduled into the computerized order entry system to be given prior to first incision of the upcoming operation. We found, that, among 485 patients with self-reported beta-lactam allergy, only 117 (24%) reported a history consistent with anaphylaxis, a figure smaller than the one determined by Blumenthal et al (~40%). Using our assessment, 277 (57%) patients ended up receiving beta-lactam prophylaxis with none subsequently experiencing adverse reactions. Following

implementation of this process at our institution, the overall use of alternative antibiotic prophylaxis at our institution among those reporting a beta-lactam allergy decreased from 82% to 56% and was directly associated with the number of monthly assessments.

Because access to skin-testing and allergist consultation is not readily available for the large volumes of elective surgeries performed yearly in most centers, this interdisciplinary approach can provide an efficient solution to the problem well-demonstrated by Blumenthal et al. A simple screening tool utilizing the principles of prospective audit and feedback can increase the use of beta-lactam perioperative prophylaxis without any adverse events and without the use of skin testing.

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Conflicts of Interest

AV, JC, and JP report no conflicts of interest.

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