

The Penicillin Allergy Clinic

Dear Orthopaedic Surgeon,

As of September 2020, our clinic will begin testing patients in Winnipeg for true Penicillin/Amoxicillin allergy in an attempt to de-label all false allergies. Approximately 10% of patients report a Penicillin allergy of which 95% are false. This leads to unnecessary avoidance of Penicillin/Amoxicillin and sometimes Ancef/Cefazolin in place of more expensive broad-spectrum antibiotics such as Vancomycin leading to increased surgical site infections, increased intra-operative time, and increased length of stay in hospital. *Choosing Wisely recommends ALL patients with a Penicillin allergy be referred for allergy testing [1].*

Our de-labelling process is incredibly safe and requires only a few hours of the patient's time. Our process allows us to de-label low risk patients which is the majority of patients who carry a Penicillin or Amoxicillin allergy label. Any patients we deem higher risk who are unable to be de-labelled at our clinic will be referred to an allergist for further management. We do not offer skin testing as the most recent studies and guidelines state that skin-prick and intra-dermal testing are not required for a majority of patients who are at low-risk for a Penicillin/Amoxicillin allergy. There are numerous benefits to you and your patients by removing their Penicillin/Amoxicillin allergy such as...

Benefits to Orthopedic Patients by Removing Penicillin/Amoxicillin Allergy

- 50% reduced odds of surgical site infection [2]
- Reduced surgical site infection after arthroplasty associated with Vancomycin [3,4]
- Reduced surgical site infection after shoulder arthroplasty associated with Clindamycin [5]
- Reduced Vancomycin use, minimizing delays to initiation of incision time in the OR [6]
- Reduced intraoperative time [6]
- Reduced length of hospital stay [7]
- Reduced risk of *Clostridium difficile* (35%) and MRSA (55%) [8]

Benefits to Healthcare System by Removing Penicillin/Amoxicillin Allergy

- Inpatient costs savings were \$1145-\$4254 per patient when Penicillin allergy was removed [9]
- Average antibiotic costs per patient decreased from \$1,265.81 to \$592.08 USD, a 53% savings [10]

To provide your patients the best possible care and reduce healthcare costs, <u>please fax a consult to</u> **1-888-736-1743 addressed to the 'The Penicillin Allergy Clinic'**.

Sincerely,

Dr. Norm Silver, FRCPC Pediatrician/Emergency Physician Dr. Taft Micks, CCFP(EM) Family/Emergency Physician

References

- 1. Choosing Wisely. American Academy of Allergy, Asthma & Immunology: Ten Things Physicians and Patients Should Question. Available from:
- http://www.choosingwisely.org/doctor-patient-lists/american-academy-of-allergy-asthmaimmunology/. March 2014

3. Jones BM, Bland CM. Penicillin skin testing as an antimicrobial stewardship initiative. Am J Health-Syst Pharm. 2017;74:232-7

^{2.} Blumental KG, Lu N, Zhang Y, et al. Risk of methicillin resistant *Staphyloccocus aureus*, and *Clostridium difficile* in patients with a documented penicillin allergy: population based matched cohort study. BMJ 2018;361:k2400

Blumenthal KG, Li Y, Banerji A, Yun BJ, Long AA, Walensky RP. The Cost of Penicillin Allergy Evaluation. J Allergy Clin Immunol Pract. 2018;6(3): 1019-1027
Chen JR, Tarver SA, Alvarez KS, Wei W, Khan DA. Improving aztreonam stewardship and cost through a pencillin allergy testing clinical guideline. Open Forum Infect Dis. 2018. May 5;5(6)

^{6.} Mattingly II TJ, Fulton A, Lumish RA, Wiliams AMC, Yoon SJ, Yuen M, et al. The Cost of Self-Reported Penicillin Allergy: A Systematic Review. J Allergy Clin Immunol Pract 2018;6:1649-54