

Lions Gate Hospital Penicillin Allergy Clinic

Serviced by Coastal SPIRES Team (Antimicrobial Stewardship Program)

Updated Jan 20, 2021

- 1. Background and rationale**
- 2. Clinic overview**
- 3. Referral process**
- 4. Direct oral challenge (DOC)**
- 5. Penicillin skin test (PST)**

Appendix 1. clinic referral form

1. Background and rationale

Guiding document:

- **BC PROVINCIAL ANTIMICROBIAL CLINICAL EXPERT GROUP DELABELING BETA-LACTAM ALLERGIES: A STANDARDIZED PRACTICE GUIDELINE AND TOOLS FOR STEWARDSHIP PROGRAMS**

Penicillin is the most commonly reported drug allergy, reported by 5-10% of the population (1-3). A number of studies have demonstrated that more than 90% of patients reporting a penicillin allergy are not truly allergic and are able to tolerate beta-lactam antibiotics (1,4-8). Even among patients with true type I hypersensitivity to penicillin (immediate reactions such as anaphylaxis), 8 out of 10 will lose sensitivity after a decade (9,10). Despite this, high rates of penicillin allergy labels continue to persist and are associated with personal and public health consequences (11). These include the use of broad-spectrum or non beta-lactam antibiotics that may be more expensive, less effective at eradicating the infecting pathogen, cause more adverse effects (e.g. Clostridium difficile infection), precipitate multidrug resistant organisms (e.g. methicillin-resistant Staphylococcus aureus (MRSA) and vancomycin-resistant enterococci (VRE)) and increase the length of hospital stays (1,10-13). To mitigate this, our antimicrobial stewardship program is offering penicillin allergy assessment service and offering delabeling testing when eligible and appropriate.

2. Clinic overview

Location

Lions Gate Hospital

231 15th St E, North Vancouver, BC V7L 2L7

The clinic is located in Medical Day Care (MDC) in Lions Gate Hospital. It is on the main floor near 15th street entrance, across from the cafeteria.

Contact

LGH Medical Day Care (MDC)

- For scheduling appointments and sending faxed referrals
- Phone: 604-984-3822
- Fax: 604-984-3799

Coastal SPIRES (Antimicrobial Stewardship) Pharmacist

- For phone referral/consult or clinical questions
- Mobile: 604-417-8921

Clinic Staff

- Medical Day Care clerk
- Medical Day Dare registered nurses
- Infectious Diseases/Coastal SPIRES physician
- Coastal SPIRES Pharmacist

3. Referral process

Patients are identified for further assessment either through hospital admission at Lions Gate Hospital/Squamish General Hospital or via clinician referral.

Please see **Appendix 1** for clinic referral form.

Upon receipt of a referral, the pharmacist will perform the following steps:

- 1) Profile review (medical conditions, medications, allergy reactions)
- 2) Phone interview
- 3) Assess and determine if patient is required to have further testing
- 4) Based on eligibility, triage patient to direct oral challenge or penicillin skin testing
- 5) Provide testing overview to patient and obtain patient consent if applicable
- 6) Fax assessment and outcome note to the referral office

4. Direct oral challenge (DOC)

Eligibility

Low risk patients who reported penicillin allergy more than 10 years ago without anaphylaxis, severe skin reactions, or hospitalization. For example, remote rash.

Medication

Amoxicillin 250mg oral capsule x 1 dose

Overview

Patient will be seated in a MDC chair and be given one oral dose of amoxicillin 250mg.

Patient will be monitored for one hour with vitals monitoring at baseline, 30min post-dose and 60min post-dose.

5. Penicillin skin test (PST)

Eligibility

Patient with unknown reaction or type I reaction to penicillin such as immediate onset of pruritis, hives, or anaphylaxis.

Exclusion Criteria

- Patient had a type I reaction to penicillin within the last 5 years.
- Patient reported severe skin reaction such as blistering or TEN/SJS as the reaction to penicillin
- Patient with hypersensitivity skin such as chronic urticaria that may render the test false positive

Note: pregnant patients who are clinically stable with gestational age between 32 and 36 weeks are eligible for testing. Reviewed and supported by LGH OBGYN group Sept 15, 2020.

Appendix 1 Clinic Referral Form

For physician office use only – Fax completed questionnaire to LGH Medical Day Care at **604-984-3799**
Attention: Coastal SPIRES Antimicrobial Stewardship Program – Penicillin Allergy Assessment Referral

Date		Referring Physician	
Office Phone		Office Fax	
Patient Name		Patient PHN	
Patient Birthdate		Patient Contact	

Penicillin Allergy Questionnaire (patient to complete)

1. How old are you?
_____ years old
2. Who told you that you have a penicillin allergy (more than one may apply)?
 Parents or relatives Physician Nurse Pharmacist I don't know No one told me I know I have an allergy
3. Have you ever had a penicillin allergy skin test?
 Yes → go to #4 No → go to #5
4. If Yes to #3, the test result was:
 Positive Negative I don't know
5. When did you last receive penicillin?
 Never > 10 years ago 1-10 years ago Days to months ago I don't know
6. When was your last allergic reaction to penicillin?
 Never > 10 years ago 1-10 years ago Days to months ago I don't know
7. What is the nature of your reaction to penicillin (more than one may apply)?
 Rash blood pressure problems difficulty breathing tongue/lip swelling
 Feeling jittery Dizziness Tingling Fatigue Nausea/Vomiting Diarrhea
 Heartburn/abdominal discomfort Chest pain/palpitations
 Other, specify:
8. Was there any blistering/skin peeling?
 Yes No I don't know
9. How quickly did the reaction develop after the penicillin was taken?
 Minutes to hours Hours to days More than 1 week I don't know
10. Have you ever been diagnosed with Stevens Johnsons Syndrome or toxic epidermal necrolysis related to penicillin?
 Yes No I don't know

Additional Comments: