

A case-based update

## "Keep that latex away from me!"

Karen Binkley, MD, FRCPC

	Age: 28
	Presentation: Presents with hand irritation
	✓ Patient is a nurse.
	<ul> <li>✓ Hand rash has been present for three to four months and is becoming progressively worse.</li> <li>✓ Hands are itchy, red and flaky.</li> </ul>
	√ Hands are itchy, red and flaky.
	√ Susan has worked in the intensive care unit (ICU) for five years.
	√ She washes her hands frequently and is regularly required to wear gloves.
	√ Past history is remarkable for mild atopic dermatitis during childhood.
	√ She has seasonal allergic rhinoconjunctivitis that has been worse in the fall for the past two years; her symptoms are controlled with antihistamines.
1	√ Recently, she has noticed increasing perennial symptoms that seemed to go better when she was on vacation.
	√ She had mild asthma during childhood, but is not currently taking any medications for it.
	✓ She is otherwise well.
	Physical exam is unremarkable except for pale and swollen nasal turbinate
	√ Chest is clear.
	$\sqrt{}$ There is an eczematous eruption over the dorsa of her hands.
	What do you suspect?

## Final diagnosis: • Irritant dermatitis • Delayed type hypersensitivity reaction to latex or other glove component • IgE-mediated hypersensitivity reaction to latex with associated occupational allergic rhinitis • Atopic dermatitis with exacerbation due to occlusion ✓ All of the above diagnoses may contribute, at least in part, to this patient's symptoms; in fact, her underlying atopic dermatitis and the occlusion caused by the frequent wearing of gloves may predispose her to irritant and delayed type hypersensitivity reactions. $\checkmark$ The patient is referred to an allergy specialist. ✓ Skin prick testing with dilute solution to latex confirms the presence of type I IgE-mediated hypersensitivity to latex. Although there is likely a component of type IV delayed hypersensitivity to the latex as well, patch testing is deferred since the patient does well using an alternate nonlatex glove. √ It will be necessary for Susan to avoid contact with rubber items like gloves, balloons, condoms, diaphragms, etc. ✓ Occasionally, systemic allergic reactions can occur after latex is ingested from foods handled with latex gloves; therefore, Susan is instructed in the use of autoinjectable adrenalin. ✓ All medical, surgical and dental care procedures Susan may undergo should be performed with nonlatex gloves and nonlatex equipment. ✓ She is recommended to consult with an anesthetist before any elective surgery. ✓ Ideally, it would be best if the patient and all co-workers could switch to nonlatex gloves; alternatively, allergen levels can be significantly reduced if co-workers switch to low-protein, nonpowdered gloves. Susan should, of course, wear nonlatex gloves in any event. √ Susan's hand dermatitis improves. Her symptoms of rhinitis are initially controlled with an intranasal Dr. Binkley is an assistant professor of medicine, division of corticosteroid, but this treatment is discontinued clinical immunology and allergy, University of Toronto, and a when the ICU switches to using nonlatex gloves. D staff member, St. Michael's Hospital and Sunnybrook Women's College Health Sciences Centre, Toronto, Ontario.