

Possible Reactions to Natural Rubber Latex

IRRITATION

Also known as: Irritant Contact Dermatitis (Non-Allergic).

Causes: Unrinsed scrubs, soaps and disinfectants; excessive powder; occlusion; hyperhydration; excessive chemical additives; insufficient post-processing.

Onset: Minutes to hours.

Initial sensory reaction: Itching or burning.

SYMPTOMS

Acute: Redness; burning; itching.

Chronic: Dry, thickened skin; cracking; sores; spaced bumps.

Extent: Stops at glove boundary.

Predisposition (History of Allergies): No.

Respiratory involvement: No (except as irritant trigger).

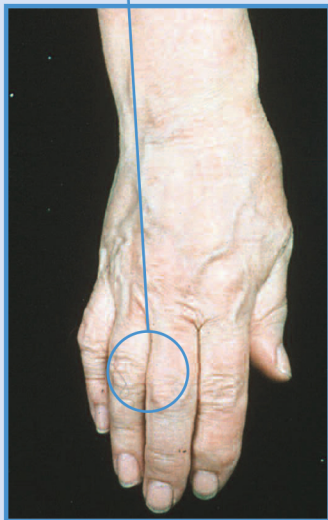
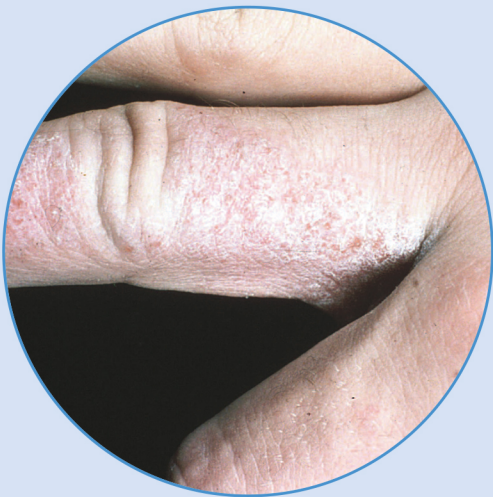
Facial involvement: Only if face is touched.

Systematic involvement: No.

How acquired: Skin contact (Natural Rubber Latex or Synthetics).

Life Threatening: No.

Action: Rinse hands thoroughly after washing; implement hand care regimen; select a different type of glove; select a glove low in chemical additives or post-processed for chemical neutralisation.



DELAYED TYPE HYPERSENSITIVITY

Also known as: Allergic Contact Dermatitis; Type IV.

Causes: Scrubs, soaps and disinfectants; glove chemicals; accelerators; preservatives.

Approximate % of population affected: 7 - 14.7%.

Onset: 6 to 48 hours.

Initial sensory reaction: Itching first:- continuing to pain.

SYMPTOMS

Acute: Small clustered bumps; vesicles; itching; redness; pain.

Chronic: Dry, thickened skin; cracking; sores; spaced bumps.

Extent: May extend beyond glove boundary.

Predisposition (History of Allergies): Yes.

Respiratory involvement: No (Although recent reports indicate potential for a Type IV component respiratory response).

Facial involvement: Only if face is touched.

Systematic involvement: No.

How acquired: Skin contact (Natural Rubber Latex or Synthetics).

Life Threatening: No.

Action: See a Dermatologist; select a glove proven low in chemical contact sensitisers (latex or non-Latex).



IMMEDIATE TYPE HYPERSENSITIVITY

Also known as: Urticaria; Type I.

Causes: Proteins in the Natural Rubber Latex 'sap' from the rubber tree, Hevea Brasiliensis.

Approximate % of population affected:

General population: 0.8 - 6%.
Hospital population: 3 - 12%.

Onset: Seconds to an hour or more.

Initial sensory reaction: Itching, tingling.

SYMPTOMS

Acute: Hives; swelling; watery eyes; runny nose; difficulty breathing; abdominal cramps; dizziness; low blood pressure; rapid heart rate.

Chronic: Anaphylactic shock.

Extent: May extend beyond glove boundary and become systematic.

Predisposition (History of Allergies): Yes.

Respiratory involvement: Yes - runny nose; difficulty breathing; asthma; wheezing; tightening of throat.

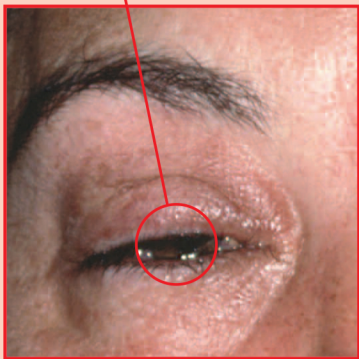
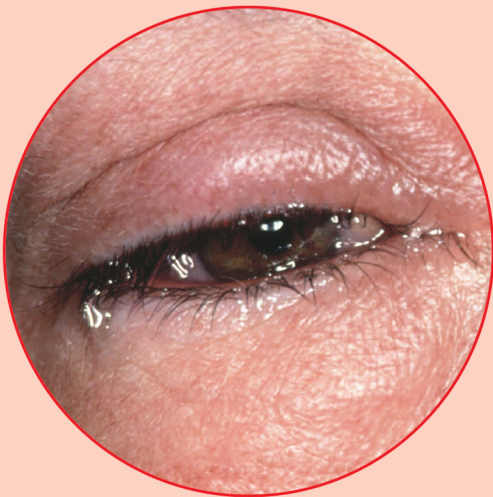
Facial involvement: Yes - Swelling of eyelids, lips, face; tearing, itchy eyes; runny nose regardless of contact location.

Systematic involvement: Yes - hives; swelling; watery eyes; runny nose; difficulty breathing; abdominal cramps; dizziness; low blood pressure; rapid heart rate; Anaphylactic shock.

How acquired: Skin / mucous membrane contact, invasive procedures; injection; inhalation of aerosolised allergen (e.g. on powder) (Natural Rubber Latex).

Life Threatening: Yes

Action: 'Immediate Care Prepare' for anaphylactic emergency; see an allergist; work in a powder free environment; select a non-latex glove; if patient, flag chart for latex free care; if at risk, but without symptoms, wear low protein allergen non-powdered gloves.



REACTION TO NATURAL RUBBER LATEX

ALLERGY TO CHEMICALS IN GLOVES (ACCELERATORS)

ALLERGY TO PROTEINS IN NATURAL RUBBER LATEX