

The Difference Between Allergic and Injection Site Reactions

This handout explains the difference between allergic reactions and reactions from getting a shot. It is important to know the difference so you can avoid delays in treatment and use the medicine safely.

Injection Site Reaction

All medicines given as a shot have the potential to cause a *local* reaction. Local refers to side effects occurring only at the site of shot. These include: redness, itching, pain, swelling, bruising, burning, or a small amount of blood loss. Site reactions are usually mild and go away within one to three days.

How to Reduce Your Chance of a Reaction

- Let the medicine sit at room temperature for up to 30 minutes before use. This helps reduce pain.
- Give diphenhydramine (Benadryl) 30 minutes before or apply hydrocortisone cream after to help with itching, redness, and swelling. An over the counter pain reliever may also be used. Talk with your provider first to find out which product is right for you.
- Allow the skin to dry after using the alcohol swab. If the skin is wet, a small amount of alcohol might be pushed in by the needle and cause burning.
- A cold pack applied to the site before and after the shot may help to numb the area. Do not use a warm compress or heating pad as this will increase blood flow and may cause more pain.
- Make sure the shot is given in fatty areas by pinching the skin. A shot in a muscle hurts more than in fat.

- Always rotate sites where the shot is given.
- Never give a shot into a bruise, scar, visible vein or areas with redness, swelling, or broken skin.
- Always write down site reactions including all side effects and what you did to help them. Bring your notes to your next clinic visit.

When to Call Your Provider

Call your provider if these uncommon side effects occur at any time:

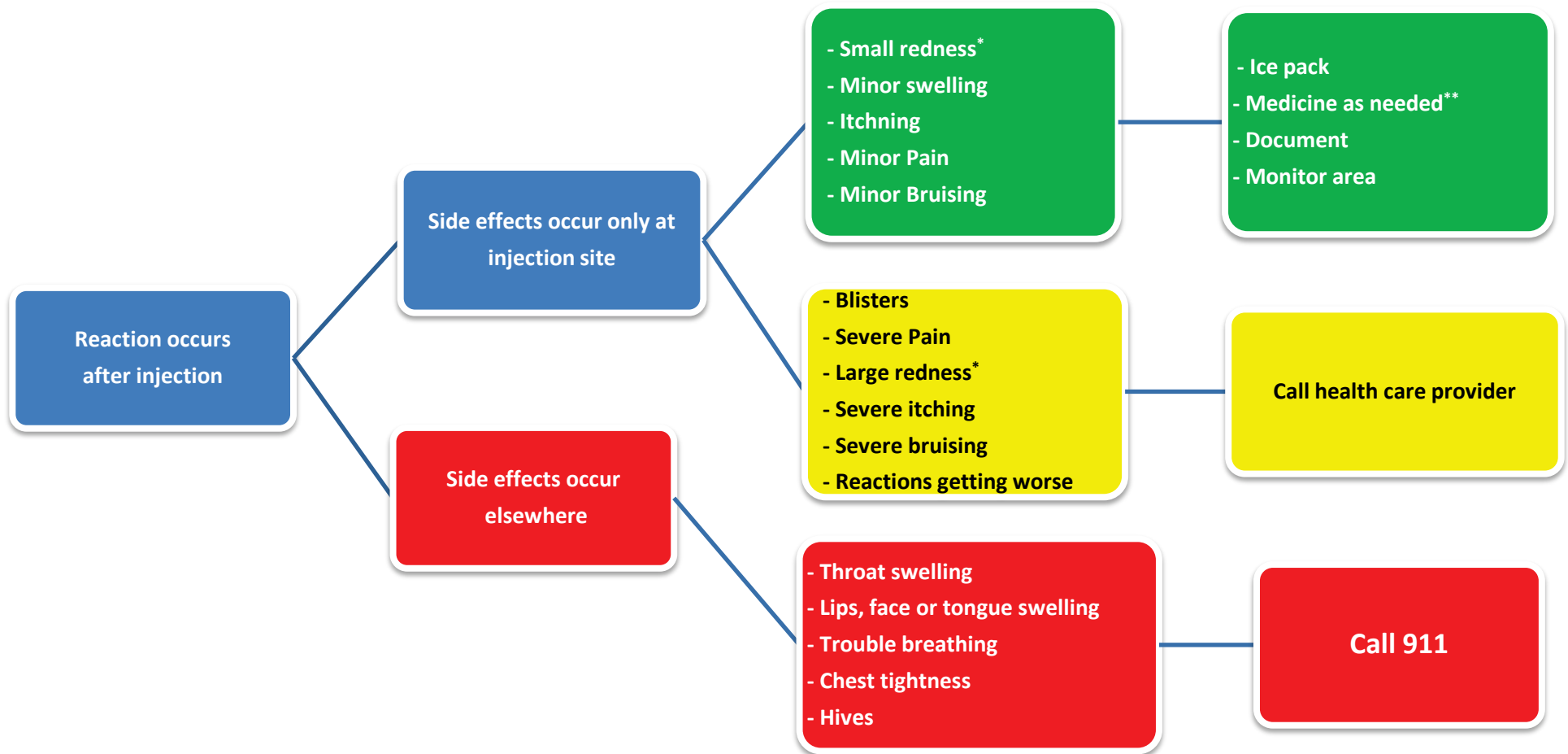
- Reaction does not go away after 3 days.
- The local reaction is severe. Severe means: blisters, redness that is larger than your fist (more than 2 inches across), severe bruising, bleeding, pain or itching.
- Site reactions seem to be getting worse with each shot.
- A rash across the bridge of your nose and cheeks
- Purplish-red spots that you see anywhere on your body.

When to Call 911

Rare but serious reactions have occurred in less than 1% of people. Symptoms include:

- Swelling of the face, lips or tongue
- Throat swelling or trouble breathing
- Chest tightness
- Hives

Reaction Action Plan



*Small redness means no larger than 2" across or smaller than your fist

*Large redness means larger than 2" across or larger than your fist

**Medicines include:

- Over the counter pain product
- Diphenhydramine (Benadryl) or hydrocortisone cream applied afterwards for itching

References:

1. UpToDate. <http://www.uptodate.com/contents/search>. Accessed 6/23/16.
 - a. Adalimumab: Drug information.
 - b. Certolizumab pegol: Drug information.
 - c. Golimumab: Drug information.
2. American Academy of Allergy Asthma & Immunology. Treatment of Local Injection Reactions. <http://www.aaaai.org/ask-the-expert/treatment-injection-reaction>. Accessed 6/23/16.
3. Mocci G, Marzo M, Papa A, Armuzzi A, Guidi L. Dermatological adverse reactions during anti-TNF treatments: Focus on inflammatory bowel disease. *J Crohn's Colitis*. 2013;7:769-779