

What is a contrast extravasation?

Contrast extravasation (ek-strav-ah-za-shun) is a problem that occurs when contrast dye leaks into the tissue around the vein where the IV (IntraVenous needle) was placed. Sometimes, during a computed tomography scan (CT) or magnetic resonance imaging scan (MRI), contrast dye will be put into your vein with an IV needle so that your veins and arteries will show up more clearly on the scan.

Research shows that contrast extravasation is a rare problem that occurs in less than 1% of patients. The American College of Radiology has looked into what increases the chances of extravasation. Some examples include giving a large amount of contrast or having veins that are easily broken (also called brittle veins).

We will do our best to prevent this problem from happening. While you are having your CT or MRI scan, a staff member will stay with you so that extravasation can be detected early and, if necessary, stop the injections. Even with careful placement of the IV and extra precautions, extravasations can still happen.

How is contrast extravasation treated?

If contrast extravasation happens, we will have you raise your arm above the level of your heart and apply a cold compress to the IV site. An ice pack also helps to limit any pain you may have – both while you are at the medical center and over the next few days.

After you leave the Radiology Department, follow these steps:

- Apply ice to the affected areas for 15 minutes, remove for 5 minutes and repeat for up to 4 hours (to protect your skin, wrap the ice in a clean cloth before putting it on your skin)

If you continue to have pain, discomfort, or swelling after the first 24 hours, please call the Radiology Department and they will arrange to have the site checked.

In rare cases, further treatment of the site is needed. Symptoms to watch for are:

- Ongoing pain
- Swelling
- Discoloration
- Redness, including redness that goes up your arm

Questions or Concerns

If you have any questions or concerns please call the Radiology Department:

- If you had your procedure at the California, Davies, or Pacific Campus call 415.600.3232
- If you had your procedure at the St. Luke's Campus call 415.641.6586

References:

1. American College of Radiology, ACR Committee on Drugs and Contrast Media. *ACR Manual on Contrast Media – Version 8, 2012* [Internet]. Chapter 3, Extravasation of Contrast Media [cited 10 December 2012]; p. 17-19. Available from: <http://www.acr.org/Quality-Safety/Resources/Contrast-Manual>
2. Wang CL, et al. Frequency, management, and outcome of extravasation of nonionic iodinated contrast medium in 69,657 intravenous injections. *Radiology*. 2007 Apr;243(1):80-7.

Note: This information is not meant to replace any information or personal medical advice which you get directly from your doctor(s). If you have any questions about this information, such as the risks or benefits of the treatment listed, please ask your doctor(s).

Produced by the staff and physicians at California Pacific Medical Center in association with the Center for Patient and Community Education. Last updated: 05/14

© 2014 California Pacific Medical Center