Nail Changes During Treatment With Taxane-based Chemotherapy

This information describes nail changes that you may have while taking taxane-based chemotherapy and how to manage these changes.

Your fingernails and toenails may change if you’re taking a type of chemotherapy medication known as taxanes. There are a few kinds of taxane chemotherapy medications. The taxane chemotherapy medications that most often cause nail changes are:

- Docetaxel (Taxotere®)
- Paclitaxel (Taxol®)
- Albumin-bound paclitaxel (Abraxane®)
- Capecitabine (Xeloda®)
- Pegylated doxorubicin (Doxil®)

Nail Changes

You may have any of the following nail changes in some or all of your nails:
- Changes in the color of your nails (dark or light)
- Grooves or ridges
- Nails that break more easily
- Changes in nail shape or texture
- Nail splitting
- Nail separation from the skin below. This may or may not be painful.
- Discharge or fluid from under the nail. It may or may not smell bad and be painful. This may or may not be an infection.
- Swelling in the tips of your fingers or toes
- Slow nail growth
- Growth on the side of your nails

These nail changes can involve your nail plate, nail bed, the area around or under your nail, or all of these areas (see Figure 1).

Figure 1. The parts of your nail
These changes may stop you from doing your usual activities. It may be hard to pick up small things such as a pen or a fork. You may have trouble buttoning your clothes. Some people have trouble walking.

For some taxanes, the risk of developing side effects is very high. For others, the risk is much lower. Your doctor will talk with you about the taxane medication you’re taking and your risk for developing nail changes.

You may notice nail changes as early as 3 to 6 weeks after treatment begins. The changes usually go away when:

- The dose of your medication is lowered.
- Treatment is stopped.

It takes about 6 months to regrow a fingernail and up to 1.5 years to regrow a toenail. Most new nails will look normal. However, for some people, the new nails may regrow abnormally. Your doctor or nurse will speak with you about this.

**Managing Your Symptoms**

Tell your doctor or nurse as soon as you begin to have any symptoms of nail changes. They can give you medication to help.

Follow the suggestions below to manage these symptoms.

**Do not:**
• Take hot baths or soak your hands or feet in hot water or hot tubs.
• Wear tight-fitting gloves, socks, pantyhose, or shoes.
• Do anything that would cause friction or pressure on your nails, such as walking long distances or wearing tight-fitting shoes.
• Bite or peel your nails.

Do:

• Tell your doctor if you have diabetes, vascular disease, peripheral neuropathy, or an autoimmune disease. These things may increase your risk of skin breakdown, slow wound healing, and infection.
• Ask your doctor or nurse if you can place cold packs on your hands and feet while you’re getting chemotherapy. If you can, start using them 15 minutes before each chemotherapy infusion starts and keep them on until 15 minutes after the infusion is finished.
  ○ For more information, ask your nurse for the resource called *Nail Cooling During Treatment with Taxane-based Chemotherapy* (www.mskcc.org/pe/nail_cooling_taxane_chemotherapy)
• Keep your hands and feet well-moisturized with fragrance-free creams or ointments. Try thick creams or ointments,
such as:
- Eucerin®
- Aquaphor®
- Vaseline®
- Bag Balm®
- Udderly Smooth®
- Cetaphil®
- CeraVe®
- Vanicream®
- Vaseline® Intensive Care™

- Wear soft, padded shoes or slippers. Examples are Tempur-Pedic® slippers and Crocs®.
- Wear soft, cushioned, cotton socks with all your shoes.
- Wear white cotton gloves when carrying objects, doing physical work, or playing sports. You can use vinyl gloves for dishwashing.
- Keep your nails short with smooth edges. You can trim them using a nail clipper and file.
- Speak with your doctor or nurse about your nail health and ask if you can get manicures or pedicures at salons.
- Your doctor may check to see if you have a bacterial or fungal infection that’s causing your nail symptoms. To do this, they
may clip or scrape off a small part of your nail.

- If your symptoms continue or get worse, your doctor may remove your entire nail. This will let them clean your nail bed and may help to control your pain.

Other suggestions

- Use biotin (Appearex®) for brittle nails.
- See a podiatrist if necessary. A podiatrist is a doctor who treats conditions of the foot, ankle, and leg.
- Soak your fingers or toes in a mixture of equal parts white vinegar and tap water for 15 minutes every night if you have any signs or symptoms of infection. Signs or symptoms of infection include:
  - Redness
  - Drainage that may or may not have a bad smell
  - Skin that is warm, hot, painful or hard to the touch
  - A fever of 100.4 °F (38 °C) or higher
  - Chills

Call your doctor if you have any signs or symptoms of infection.

Call Your Doctor or Nurse if You Have:

- A fever of 100.4 °F (38 °C) or higher
- Chills
• Any symptoms that get worse
• Any of the following symptoms around or under your nail:
  ○ Skin that is warm, hot, painful or hard to the touch
  ○ Bright yellow or green drainage
  ○ Bleeding
  ○ A bad smell
  ○ Increasing redness or swelling
  ○ Increasing pain or discomfort
  ○ Redness
• Any questions or unexpected problems

If you have any questions, contact a member of your healthcare team directly. If you're a patient at MSK and you need to reach a provider after 5:00 PM, during the weekend, or on a holiday, call 212-639-2000.

For more resources, visit www.mskcc.org/pe to search our virtual library.