# **Nail changes**

Cancer treatment can affect the fast-growing cells in your nails, leading to changes in the fingernails or toenails. Although the severity differs from person to person, nail changes may be visible and uncomfortable, and can at times affect your daily

activities such as buttoning your shirt. Examples of nail changes include nail breakages, darkening, surrounding swelling and redness. Many of these changes begin to improve a few weeks after the completion of treatment, but care should be taken during the treatment phase to decrease discomfort and prevent complications.



## **Causes of Nail changes**

Some cancer treatments are more likely to cause nail changes than others. These include:

- **Chemotherapy**, particularly taxanes (e.g. paclitaxel, docetaxel), anthracyclines (e.g. doxorubicin) and Capecitabine or 5-Fluorouracil.
- Hormonal therapy, namely tamoxifen.
- Targeted therapies, particularly EGFR inhibitors (e.g. Erlotinib).

### What you need to look out for

Not all people will experience nail changes, but if you do, they usually occur about 3-6 weeks after starting cancer treatment. Some of them may include:

- Weak, brittle nails that tend to break or crack more easily
- Nail colour changes: darkening or changes in colour (e.g. to yellow or brown)
- Changes in nail thickness, shape or texture
- Nail separation from nail bed
- Line marks, grooves or ridges along the nail
- Red, painful or frayed surrounding skin
- Development of ingrown nails
- Slow nail growth

Unlike those caused by chemotherapy, nails changes caused by targeted therapies usually come in the form of nail fold infections (paronychia) and red skin growths around the nails that bleed easily (pyogenic granulomas).

#### How it can be treated

Most nail problems are temporary, and should heal within a few weeks. Marks on nails will grow out in time. Taking care of your nails to prevent complications is the best treatment for nail problems (see section on "*What you can do*" below). If you develop a bacterial or fungal infection around your nails, your doctor may prescribe you with antibiotic or antifungal therapy.



#### What you can do

The following are some of the do's and don'ts to help you manage nail changes, as well as prevent further complications:

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Prevent nail damage	
<ul> <li>Keep your nails short and smoothen any jagged edges with a nail file</li> </ul>	<ul> <li>Avoid wearing tight-fitting footwear</li> </ul>
<ul> <li>Moisturize your nails and surrounding skin regularly, to prevent dryness</li> </ul>	
<ul> <li>Apply formaldehyde-free nail polish to hide colour changes and increase nail strength, if your nails are intact. Consider using a nail moisturizer instead of polish if your nails are loose or very dry</li> </ul>	
<ul> <li>Use an acetone-free nail polish remover, which is gentler and less drying on your nails</li> </ul>	
Prevent infection	
<ul> <li>Keep your hands and nails clean, to avoid infection</li> </ul>	<ul> <li>Avoid using artificial nails as they can trap bacteria and cause infection. Nail adhesives may also have chemicals that can cause allergic reactions</li> </ul>
<ul> <li>Wear protective gloves to protect your nails when doing household chores or gardening. Prolonged exposure to water leads to a higher risk of fungal infection in the nail bed</li> </ul>	

- Avoid professional manicures and pedicures due to risk of infection from shared manicure instruments
- Avoid biting your nails
- Avoid ripping or peeling off any frayed or loose surrounding skin. Cut it carefully with a clean pair of nail scissors

#### When to call your cancer care team

Please inform your doctor or nurse as soon as you notice any signs of inflammation or infection over your nails:

- Redness and warmth
- Swelling
- Draining fluids or pus
- Worsening pain

If you have any questions regarding the above information, please call Cancer Helpline at **+65 6225 5655** or approach your doctor or nurse for further details.

The above contents are made available as part of TEMASEK FOUNDATION-ACCESS (Accessible Cancer Care to Enable Support for Survivors) PROGRAMME, a holistic care programme to support cancer patients during their care and recovery journey.

The contents have been approved by the Cancer Education Information Service, National Cancer Centre Singapore (NCCS), for people with cancer and their families and caregivers. However, this information serves only as a guide and should not be used as a substitute for medical diagnosis, treatment or advice. For specific medical conditions, please seek expert medical advice from your healthcare team.

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