

# Toenail Trouble Part 1

Healthy Facts

Paul Gabriel Scullion  
Podiatric Surgeon

## Introduction

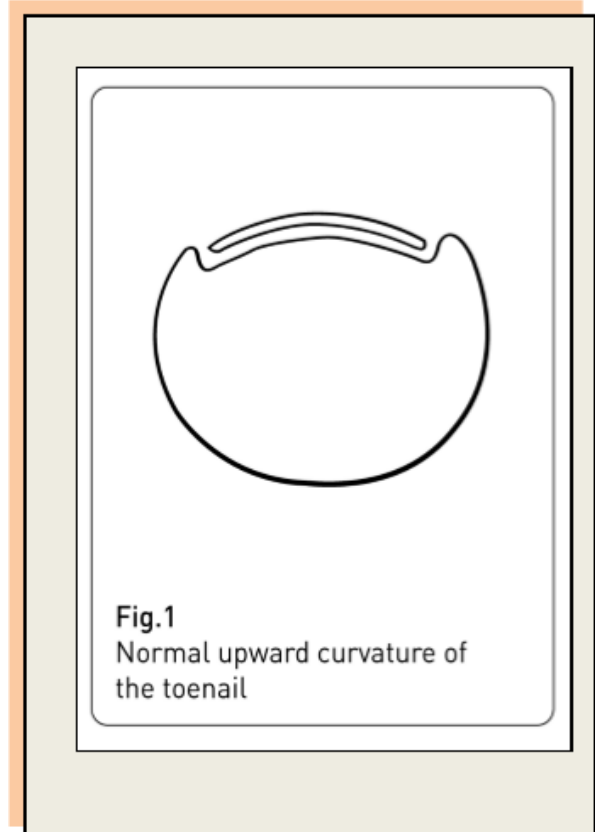
If you have ever suffered with problems associated with your toenails and had them incorrectly cared for, then you can certainly appreciate how excruciatingly painful and debilitating they can be. The following article will inform you about the normal healthy toenail and in Part 2 I discuss some common toenail problems and their treatment.

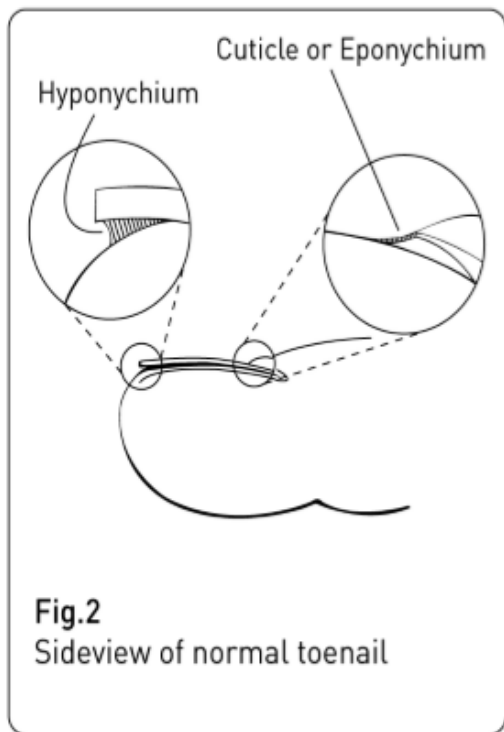
### HEALTHY TOENAIL FACTS

The human toenail will on average fully renew itself every 18 months. Speed of growth is dependent on the amount of sunlight so they grow slower in the autumn and winter and faster in the spring and summer. Growth rates will speedup following an injury to the nail bed that causes the nail plate to fall off.

Toenails and fingernails will reveal a history of their owner's general health over the previous year. It is for this reason the medical condition of **psoriasis**, when viewed by an expert, is primarily diagnosed by the appearance of the nails. Small pits will cover the surface of the nail in these individuals.

Toenails grow from specialised tissue called **germinating matrix**. You can easily see this tissue through your own healthy fingernail for it is the white half crescent at the base of the nail. The normal nail has a smooth upward curvature between both borders (Fig 1) and is made up of a compacted version of skin protein called **keratin**. Normal toenails are transparent and derive nourishment from the blood-enriched nail bed. This is why healthy nails have a pink appearance.





By design toenails have a protective thin skin seal (**cuticle** or **eponychium**) on top where the nail plate grows out of the toe. And also another thin skin seal under the nail plate (**hyponychium**) as it grows off the toe (Fig 2). Such seals naturally protect the sensitive internal nail bed tissues from entry of infection. The thin cuticle on top can best be seen on your own fingernails. If you look closely you will most likely see that very few fingers have these natural skin seals intact. Most are frayed or torn. Such damaged seals on your toenails can allow the entry of infections such as fungi into the forming nail plate.

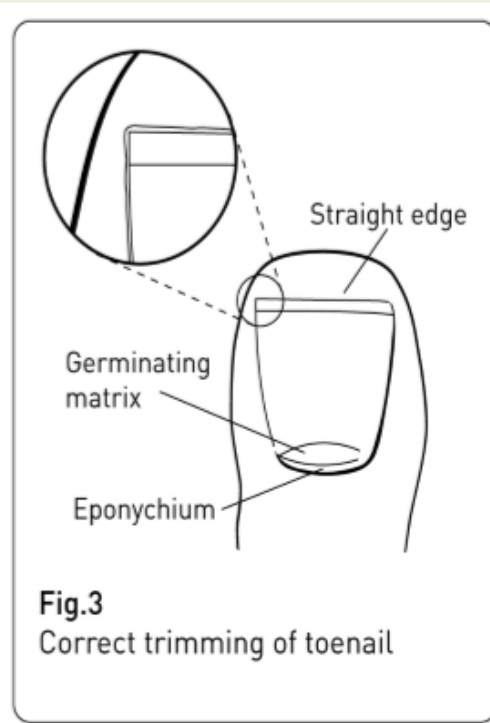
### SELF CARE

To maintain normal healthy toenails they should be trimmed straight across (Fig 3) and never rounded (Fig 4), as you would do for the fingernails.

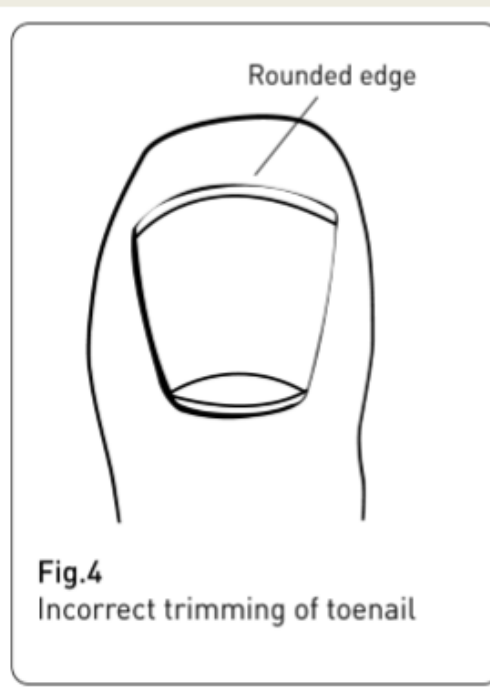
A small overhang needs to be left at the free edge of the nail. This provides natural support for the border of the nail (technically known as the **sulcus**).

A nail file or emery board can also be used to smooth any roughness of the free edge following trimming.

Periodic moisturising of the nails with a foot cream will maintain the soft surrounding skin seals of the nail bed.



**Fig.3**  
Correct trimming of toenail



**Fig.4**  
Incorrect trimming of toenail

Mr. Scullion is a podiatric surgeon. He guest lectured for 10 yrs for the MSc in Sports Medicine at Trinity College Dublin.

He is consultant and director for Biomechanics Foot Laboratory Ltd., and has been in private practice both in The Castleknock Clinic, 23 Castleknock Avenue, Laurel Lodge, Castleknock, (from 1984 to 2013) and The Kirkfield Foot Clinic, 4 Kirkfield Cottages, Dublin 15 since 2013.

His clinic telephone number is 01 8103552

His web page is <http://www.kirkfieldfootclinic.com>

His laboratory web page is [www.biomechanicsfootlab.com](http://www.biomechanicsfootlab.com)