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## Ingrown toenails

### What are ingrown toenails?

An ingrown toenail is a painful condition of the toe that occurs when the sides or corner of the toenail digs into the skin at the end or side of the toe. The condition mostly affects the outer edge of the big toe, although the nail on both sides of the toe, or nail on any toe can become ingrown.

An ingrown toenail is also known as onychocryptosis.

### What causes ingrown toenails?

The causes for ingrown toenails are listed below, but the two most common causes are ill-fitting shoes and improperly trimmed nails.

- Ill-fitting shoes such as tight shoes, high heels and pointed-toe shoes cause the toes to be compressed together so that the nail curls into the skin and cannot grow normally.
- Improper trimming of toenails can cause the nail edge or corner to dig into the skin. Toenails should be trimmed straight across so that the top of the nail should make a straight line.
- Injury near the nail such as a ripped nail or nail peeled off at the edge can cause an ingrown toenail.
- [Fungal infections of the nail](#) can cause a thickened or widened toenail to develop.

### What are the signs and symptoms of ingrown toenails?

Ingrown toenails can be classified into 3 stages according to severity.

Stage	Features
1	<ul style="list-style-type: none"> <li>• End of the toe becomes reddened with mild swelling</li> <li>• May feel warm and be painful to touch</li> <li>• No pus or drainage</li> </ul>
2	<ul style="list-style-type: none"> <li>• Toe becomes increasingly red, swollen and painful</li> <li>• May be white or yellow coloured pus or drainage from the area</li> <li>• Infection may have developed</li> </ul>
3	<ul style="list-style-type: none"> <li>• Symptoms of redness, swelling and pain are increased</li> <li>• Granulation tissue forms and adds to the swelling and discharge of pus</li> <li>• Lateral nail-fold hypertrophy (overgrowth of skin tissue around the affected toe)</li> <li>• More severe infection with fever may follow</li> </ul>

### Ingrown toenails



## What is the treatment for ingrown toenails?

Treatment is dependent on the stage of the condition. However, at any stage of the condition, the patient should avoid tight-fitting or high-heeled shoes. If possible, wear sandals until the condition is cleared up.

Stage 1 ingrown toenails should be managed conservatively using the following methods.

- Warm water soaks – soak the foot in warm water 4 times a day.
- Wash the foot including the affected area twice a day with soap and water.
- Cotton-wick insertion in the lateral groove corner – gently lift up the corner of the nail that is digging into the skin and place a small piece of rolled cotton or gauze between the nail and the skin to keep it elevated. This may be painful but should be done after every soaking.

Stage 2 may require the administration of topical or oral [antibiotics](#). Topical antibiotic ointments combined with local anaesthetic agents help to heal the toe faster and also provide pain relief by numbing the affected area. Surgical removal of the ingrown toenail may be required if the condition worsens.

Stage 3 ingrown toenails are often treated surgically. The surgical technique of lateral nail avulsion plus matricectomy is highly successful. A brief description of this procedure is given below.

- [Local anaesthetic](#) ring block to numb the affected toe.
- Any pus will be drained from the end of the toe.
- Ingrown toenail is cut out to create a new, straight nail edge.
- Electrocautery or phenol ablation is used to destroy any cells beneath the area where the nail plate has been cut out to prevent any regrowth of unwanted nail.
- Any excessive granulation or hypertrophied tissue should also be removed.
- Antibiotic ointment may be applied and the toe is bandaged up until it completely heals (usually within a few weeks).

The following post-surgery procedures should be followed:

- On the second day, remove the bandage and wash area with soap and water.
- Gently dry the area and reapply antibiotic ointment if prescribed, and a new bandage. This should be done once or twice daily for at least one week after surgery.
- Paracetamol or other analgesics as recommended or prescribed by your doctor may be taken to relieve pain.
- Try to keep the toe clean and dry. Do not go swimming, take baths or soak the toe for at least 2 weeks after surgery. Showering is allowed.
- Avoid running, jumping, or any strenuous activity for 2 weeks after surgery.
- Call your doctor if you develop increasing pain, swelling, redness or drainage from the toe.

## Other treatment for ingrown toenails

Ingrown toenails may also be treated by a gutter splinter using acrylic tubing, by anchor taping and with the help of sculptured nails.

## Can ingrown toenails be prevented?

Adhering to the following simple rules can easily prevent ingrown toenails:

- Clip toenails straight across – do not cut them too short and do not round off the edges.
- Wear well-fitting shoes.
- Keep the feet clean and dry.

### Related information

#### References:

- Book: Textbook of Dermatology. Ed Rook A, Wilkinson DS, Ebling FJB, Champion RH, Burton JL. Fourth edition. Blackwell Scientific Publications.
- Zuber TJ. Ingrown Toenail Removal. Am Fam Physician 2002;65:2547–50, 2551–2, 2554, 2557–8.

#### On DermNet NZ:

- [Nail disease](#)

#### Other websites:

- [Ingrown Toenails](#) – emedicine consumer health

#### Books about skin diseases:

See the [DermNet NZ bookstore](#)

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DermNet does not provide an on-line consultation service.

If you have any concerns with your skin or its treatment, see a [dermatologist](#) for advice.

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