

INGROWN TOE NAILS /  
ONYCHOCRYPTOSIS



# ONYCHOCRYPTOSIS



- It is referred to ingrown nails which affect the fingers and toenails. It is marked by nail growth into surrounding tissues and may cause infection. Incorrect trimming a shaping of nails are often responsible for ingrown nails.

## ETIOLOGY

- Improper debridement by the patient can lead to ingrown nails.
- Ill-fitting shoes may also be a causative factor.
- The presence of a subungual exostosis has been stated to be the pathogenesis.
- Excess soft tissue growing.
- Hypermobility of the first metatarsal segment and hallux valgus.
- Trauma to the nail matrix or nail bed.

# ONYCHOCRYPTOSIS

stage of ingrowth of the nail



healthy nail



stage of  
inflammation



stage of  
suppuration



chronic  
stage process

# Onychocryptosis

## Stage 1



Local irritation  
No infection, pus  
or granulation  
tissue.

## Stage 2



Infection without  
a history of  
onychocryptosis.  
Pus and/ or  
Granulation tissue

## Stage 3



Infection with  
history of more  
than one episode  
of  
onychocryptosis.  
Pus/ Granulation

## Stage 4



Infective  
onychocryptosis  
with partial  
onycholysis of a  
single nail border.

## Stage 5



Infective  
onychocryptosis  
with partial  
onycholysis of  
both nail borders.

May Perform Cauterization

Do Not Perform  
Cauterization

### Treatment (Stage 1)

1. Self Treatment
2. Slant Back
3. Suppan
4. Chemical
5. Laser
6. Cold steel
7. Daily soaking

### Treatment (Stage 2)

1. Slant Back
2. Suppan
3. Chemical
4. Laser
5. Cold steel
6. Daily soaking

### Treatment (Stage 3)

1. Winograd
2. Chemical
3. Laser
4. Cold steel
5. Daily Soaking

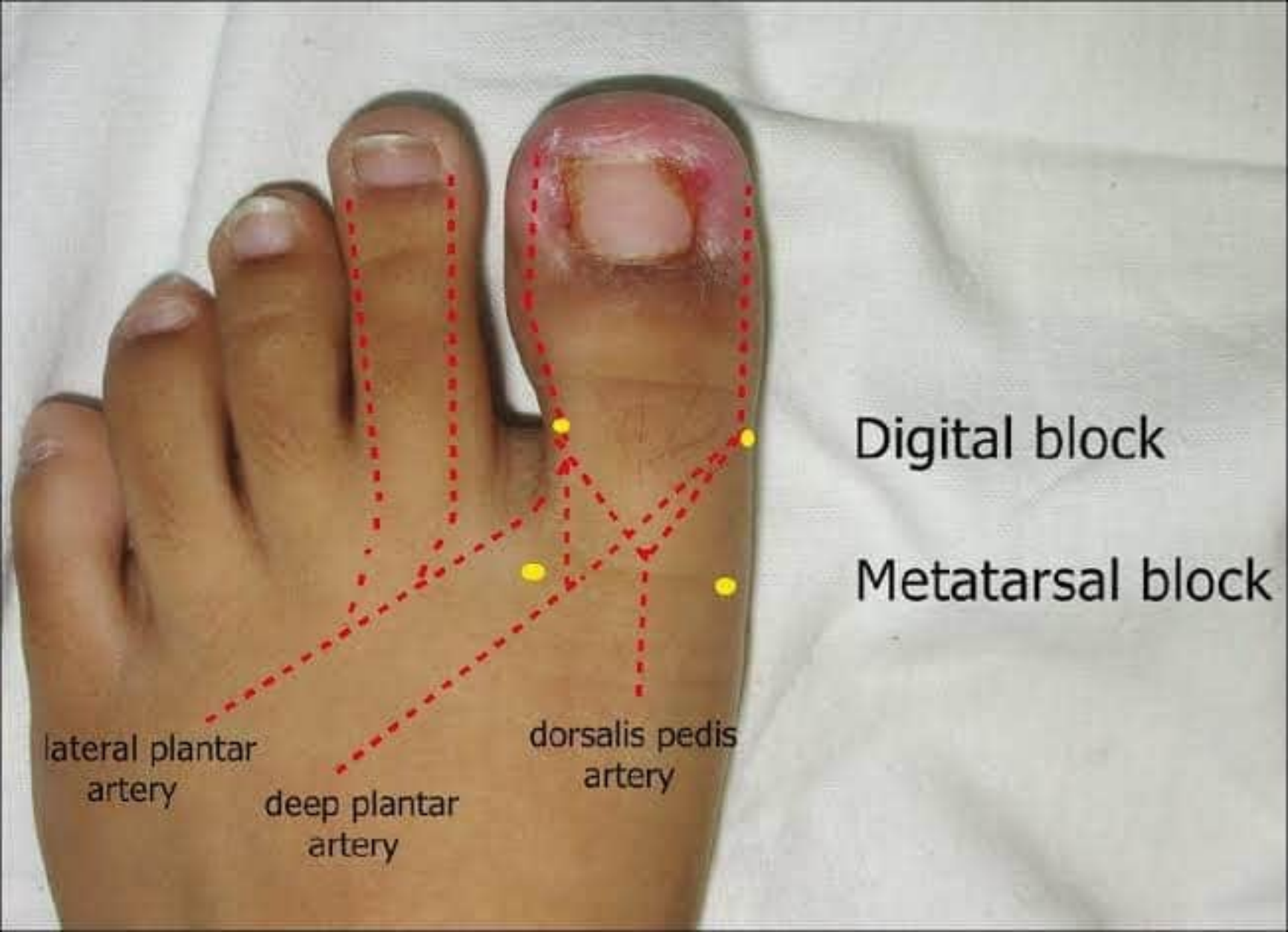
### Treatment (Stages 4,5)

1. Remove offending nail border or nail plate.
2. Resection of hypertrophic unguis. 2. Radiographs or MRI is indicated in chronic cases to rule out osteomyelitis.
3. Address osteomyelitis or periostitis.
4. Return for secondary staged procedure to include matrixectomy.
5. Resolve infection to return to Stage 1, 2, or 3 for appropriate procedure.



**Surgical Treatment For  
Ingrown Toe Nails - Permanent  
Matrixectomy**





Digital block

Metatarsal block

lateral plantar artery

deep plantar artery

dorsalis pedis artery

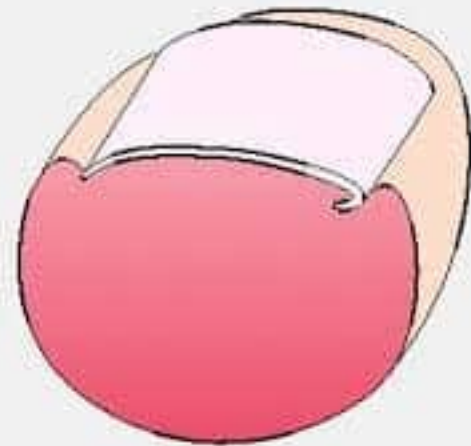




### Improperly cut normal nail



### Abnormal nail



#### Features

Normal nail plate;  
slightly convex  
from side to side

Abnormally wide  
nail or incurvated  
edge nail

#### Treatment

Advice on  
toenail trimming

Advice on  
toenail trimming

Chiropodist may  
remove offending  
nail spike

Partial nail avulsion  
with segmental  
phenol ablation

Partial nail avulsion  
is rarely needed