Fingertip injuries

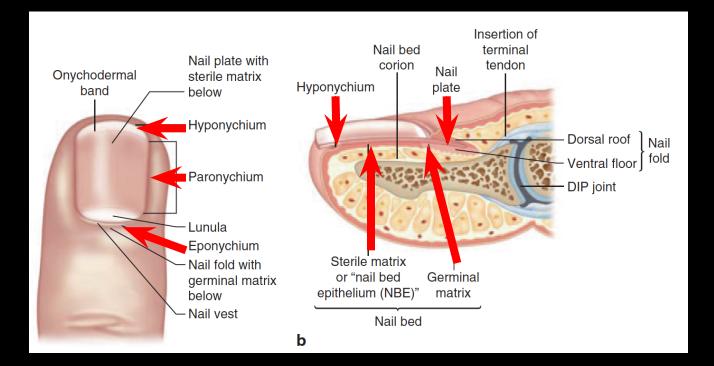
Ali Phillips Hand Fellow UHS



Take pleasure in your hands



Anatomy



Horny solehorn

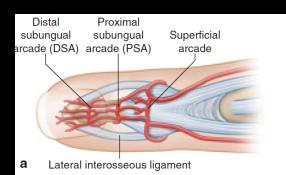
Bugs

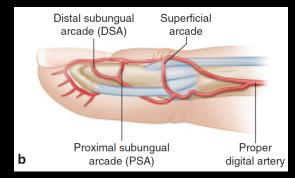
Microbe Genera Found Underneath the

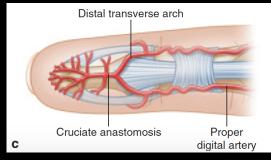
Fingernails

Bacteria	Fungus	Yeast
Pseudomonas	Trichophyton	Candida
Staphylococcus	Epidermophyton	Rhodotorula
Acinetobacter	Acremonium	
Enterobacter	Aspergillus	
Klebsiella	Scopulariopsis	
Aeromonas	Cladosporium	
Serratia		

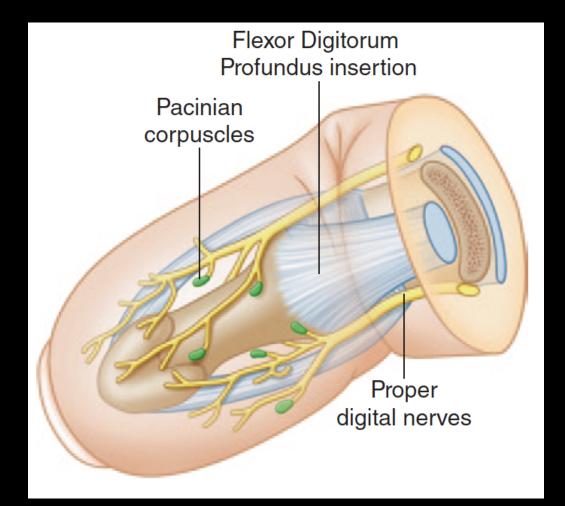
Arteries



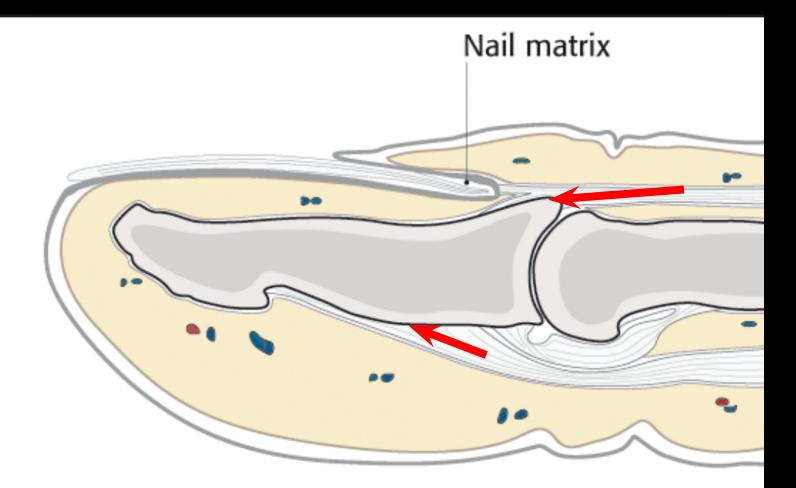




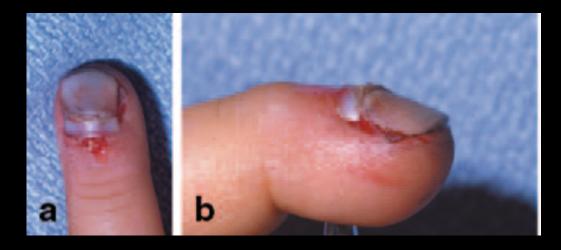
Nerves

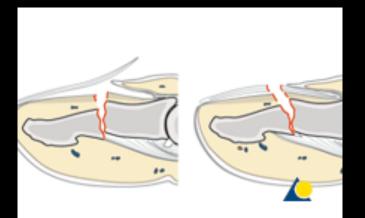


Tendons



Seymour fracture

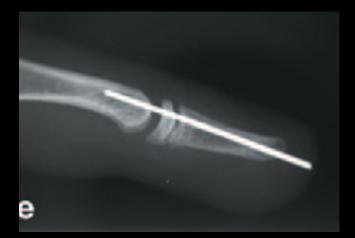




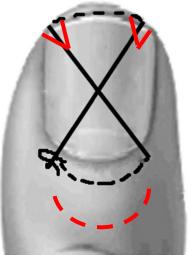


Seymour fracture









Nailbed injuries

Most common injury in the hand!

If the eponychium is not injured you don't need to replace the nail

Meticulous repair can yield good results

Non-adherance

Cause: trauma

Fix: remove nail, revise scar +/graft (split or full thickness)



Ridged nail

Cause: trauma to distal phalanx

Fix: exploration and scar excision



Eponychial loss

Cause: trauma/surgery

Fix: composite graft from big toe



Synechia/pterygium

Cause: damage to the underneath of the eponychial fold

Fix: keep it open when repairing



Split-nail

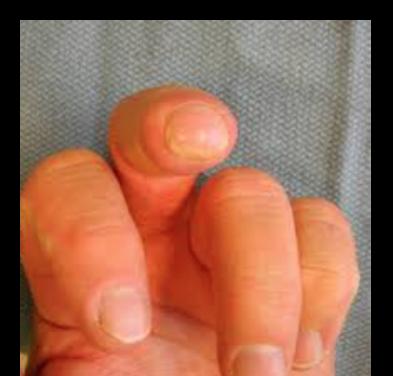
Cause: scarring in sterile or germinal matrix Fix: (meticulous primary repair) grafting as required or ablation





Hook nail

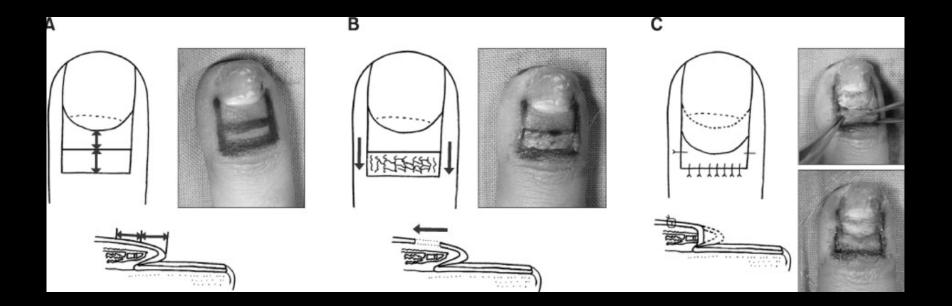
Cause: loss of volar support for nail Fix: difficult!



Loss of length

Cause: trauma

Fix: "eponychial flap"



Subungal haematoma

"50% of sterile matrix" – trephine

Often assoc with #

No need for Abx

Do not remove nail plate unless eponychial dislocation

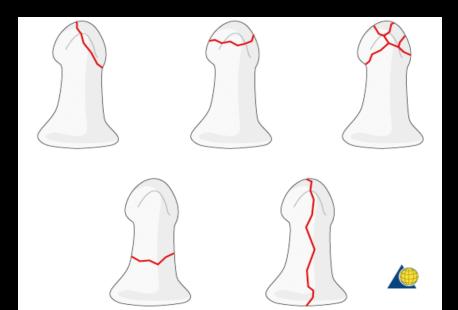
Keep clean!



Shaft

Up to 47% symptomatic non-union at 6 months

Numbness, cold insensitivity, hyperaesthesia, DIPJ stiffness



Shaft









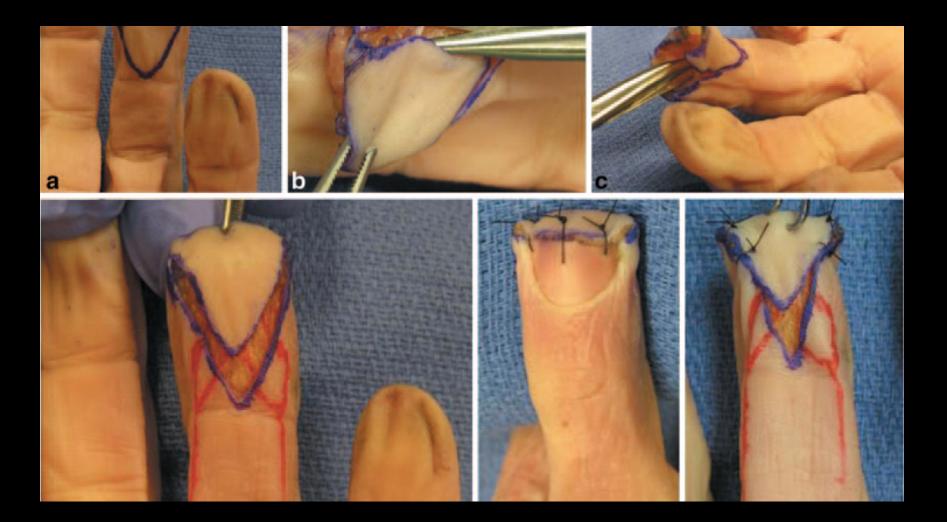
Amputations

Multiple flaps described

Replantation - only in Taiwan! (exception is thumb)

Paediatric fingertips can be sutured in place if <5h from injury

Flaps e.g. V-Y



Moist wounds heal twice as fast



GD Winter, JT Scales. Effect of Air Drying and Dressings on the Surface of a Wound. *Nature* **197**, 91-92

Moist wounds heal with less scarring



Simple washing



Primary condition



50 days after

50 days after volar view

My own experience - AW



My own experience - AW



My own experience - AW



My own experience - RB



My own experience - RB



My own experience - RB



Summary

Get to know your fingertips

Beware paediatric injuries – not benign

Get it right first time

"Moist and clean" – "let it dry and it'll die"