SKIN AND SOFT TISSUE INFECTIONS
Dermatophyte nail infection (onychomycosis)

If clinically infected: Start empirical treatment. Nail infections are best treated systemically.

Nail specimens are only indicated and will only be accepted for processing if:

- Empirical treatment failure or persistent fungal infection
- Infection in a child (16 years old or younger)
- Infections arising after foreign travel
- Unusual animal or environmental exposure
- Immunosuppressed (including HIV, diabetes and taking immunosuppressant medications)

Consider checking for athlete's foot and treat as appropriate.

Patient information/advice:

- Antifungal treatment **is not** needed if the person is not troubled by it, and/or the infection is asymptomatic.
- Onychomycosis is difficult to manage and often recurs.
- Keep nails trimmed short and filed down. Avoid sharing toenail clippers with others.
- Wear well-fitting non-occlusive shoes, consider replacing old footwear that could be contaminated.
- Maintain good foot/hand hygiene and wear protective footwear when using communal areas.
- British Association of Dermatologists Patient Information Leaflet.

Treatment:
If dermatophyte or Candida nail infection confirmed, topical antifungal treatment can be used in adults and children over 12 years if there is:

- Only very early, distal, and superficial nail involvement.
- Superficial white onychomycosis.
- A contraindication to oral antifungal treatment
- Advise that cure rates are very low – approximately 15-30%

If topical treatment is appropriate, amorolfine 5% nail lacquer can be purchased over the counter for adults (>18 years) or if diagnosis confirmed with sampling, prescribed for children (not licensed for use in children under 12 years, BNFc). Apply once or twice weekly after gentle nail filing. Continue for 6 months for fingernails and 9–12 months for toenails.

Offer oral antifungal treatment if an adult or child has a confirmed fungal nail infection and self-care measures alone and/or topical treatment are not successful or appropriate.

- If dermatophyte nail infection confirmed prescribe oral terbinafine first line.
- If candida or non-dermatophyte infection confirmed, use oral itraconazole first line (off-label). Topical nail lacquer is not as effective.

Stop treatment when continual, new, healthy, proximal nail growth.

In treatment resistant cases, combination therapy with topical and oral antifungal can be considered.

Monitor LFTs at baseline and 1 month into treatment for both terbinafine and itraconazole. Discontinue if abnormalities in liver function tests.

- Idiosyncratic liver reactions occur rarely with terbinafine. The risk of clinically relevant hepatotoxicity from terbinafine is 1 in 50,000-120,000 cases.
- Itraconazole causes mild transient transaminitis in 1-5% of patients, with a small number of case reports of delayed severe reactions.
- Both terbinafine and itraconazole have potential drug-drug interactions.

- There is no evidence of increased adverse effects from terbinafine in children (unlicensed) and it should be considered for onychomycosis as there is better response rate compared to griseofulvin (licensed in children).

Treatment[1]	Dose	Duration
***First line*:** Terbinafine (Not effective in non-dermatophyte infection)	**Child 1–17 years:** Body weight 10–19kg: 62.5mg once daily Body weight 20–39kg: 125mg once daily Body weight ≥40kg: 250mg once daily **Adult:** 250mg once daily	Fingers: 6 weeks Toes: 12-16 weeks
Second line: Itraconazole	**Adult:** 200mg twice daily for 7 days a month (pulsed therapy)	Subsequent courses repeated after 21-day intervals: Fingers: 2 courses Toes: 3 courses

[1]See BNF and BNFC for appropriate use and dosing in specific populations, e.g., hepatic, or renal impairment, pregnancy, breastfeeding.