Drainage of Subungual Haematoma (Nailbed Trephination)

Introduction:
Subungual haematoma are injuries of the nail bed in which bleeding develops under the nail. The damage is caused by a direct blow or crush injury to the distal phalanx. As blood enters the space it applies painful pressure to the nail bed.

Indication:
Current recommendations for drainage of acute (less than 48 hours) subungual haematomas advocated for trephination, a procedure where a hole is made in the nail to drain the haematoma.

Contraindications:
There are no absolute contraindications to trephination. However in some situations, patients may have better cosmetic outcomes with nail removal and nail bed repair.

If there is only minimal blood collected under the nail or the blood has been dried up, drainage is not necessary. In the event of non-traumatic development of subungual haematoma, the patient may not benefit from trephination.

Procedure:
1. Obtain consent before the procedure.
2. Prepare personal protective equipment and the electrocautery device.
3. Only uncommonly will perform a digital block or sedation.
4. Clean the digit with disinfectant (chlorhexidine, betadine or povidone/iodine solution).
5. Puncture the nail with an electrocautery device at 90-degree angle, to make a hole through the nail over the central area of haematoma. Avoid lunula and its associated nail matrix. Avoid contact the nail bed.
6. Once a hole is created, it is expected that blood will drain out from the haematoma.
7. Apply gentle pressure until blood is expressed through the hole if necessary.
8. It may take more than one trephination to decompress the haematoma completely.
9. Bandage site with sterile gauze.

Possible complications:
1. Re-accumulation of haematoma and with pain
2. Infection
3. Onycholysis (separation of the nail plate from the nail bed)
4. Nail loss
5. Nail deformity

Aftercare:

1. Keep the wound clean and dry.
2. Advise not to soak the finger/ toe as this can introduce infection.
3. Blood may continue to ooze from the hole in the nail for 1 to 2 days.
4. The haematoma should subside gradually over the next several weeks.
5. Instruct patient to see a doctor if there are signs of infection such as warmth, redness, increasing swelling and fever, and re-accumulation of the haematoma with pain.

Remarks

Complications depend on the injury severity and may occur even with precise operation. It is impossible to mention all the possible complications that may happen and the above are only a few important complications which may occur.