

Postoperative Recovery Timelines Part 1: A Review for Patients and Caregivers

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Introduction

The length of time to recover after an operation can depend on many reasons, especially the type and complexity of the surgery, as well as your overall health, mental state, and any existing medical conditions you have. To better understand the different postoperative recovery timelines in dermatology, a base knowledge of the stages of wound healing and the recovery timelines for simpler procedures is helpful.

Stages of Wound Healing

Wound healing is a natural reaction to tissue injury that occurs in multiple stages, usually over the course of 4-6 weeks. It begins with your body's blood vessels narrowing and platelets sticking together in order to stop the bleeding. Then, the vessels widen to let in more white blood cells and platelets.¹

The inflammatory phase usually lasts several days after. In this phase, your body sends more white blood cells and platelets to the area, releasing chemicals to help with healing.² They encourage new blood vessel growth, blood clotting, and skin regrowth. Cells called fibroblasts also make collagen and other stuff to build a scaffold for healing. Other cells called neutrophils clean up debris and bacteria. This phase reduces additional damage, closes the wound, clears away cellular debris and bacteria, and promotes cellular migration.³

The proliferative phase is constantly going on in the background throughout wound healing. It can last several weeks, and involves making new tissue, blood vessels, and skin. The wound begins contracting as well.

Finally, there's the maturation or remodeling phase, which starts about 3 weeks after the injury and can last up to a year. During this time, excess collagen breaks down, and the wound continues to contract. After about 3 months, the wound is at its strongest, and it continues to improve over time.⁴

Skin Biopsy

A skin biopsy is an important, extremely common diagnostic procedure in dermatology. The length of time to heal from a skin biopsy varies on the size and depth of the biopsy, its location, and your overall health. Most wounds due to a skin biopsy will heal in 7 to 14 days, with crusting, mild pain, and scarring.⁵ Certain areas like the lower legs may take longer to heal.

Linear Closure

After surgery to remove skin cancer, how quickly you heal again depends on how big and deep the removed area is, where it is, and how it was removed. One common way to close up the wound is called linear closure. In this method, the extra skin around the wound is cut so that it is no longer a circle anymore, but more like an oval. Then, the wound is stitched up layer by layer, starting from the inside and moving out to the surface of the skin. Wounds from a linear closure tend to take around 6 to 10 weeks to heal.⁶

Conclusion

Everyone's healing process can vary greatly, so don't be alarmed if yours doesn't follow the exact timeline described here. It's essential to follow your doctor's instructions for care and keep an eye out for any signs of infection or other complications. If you have any concerns during your healing journey, don't hesitate to reach out to your physician for guidance.

References

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