

Understanding Intralesional Treatment Options for Nonmelanoma Skin Cancer: An Overview for Patients and Caregivers

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Introduction

If you or a loved one has been diagnosed with nonmelanoma skin cancer (NMSC), it's important to know there are different ways to treat it. While surgery is often the first choice, there are also nonsurgical treatments that can work well, especially for those who might not be able to have surgery. This guide will explain some of these nonsurgical options, focusing on intralesional treatments. These treatments help reduce side effects and can be especially good for patients with other health problems or where surgery could affect appearance or function.

What Are Intralesional Treatments?

Intralesional treatments involve injecting medicine directly into the tumor. This method targets the cancer more precisely and reduces overall side effects. These treatments can be very useful if you have other health issues or where surgery might cause significant cosmetic or functional problems. Here, we will look at three types of intralesional treatments: chemotherapy, immunotherapy, and photodynamic therapy.

Intralesional Chemotherapy

Intralesional chemotherapy involves injecting cancer-fighting drugs directly into the tumor. Some of the drugs used include:

- 5-Fluorouracil (5-FU)
- Methotrexate
- Bleomycin

These treatments are usually well-tolerated, causing only mild and localized side effects like pain at the injection site. They are also cost-effective compared to surgery. Methotrexate and 5-

5-FU have been considered first choices for treating keratoacanthoma (KA). 5-FU has also been effective in treating cutaneous squamous cell carcinoma (cSCC) and basal cell carcinoma (BCC).

Intralesional Immunotherapy

Intralesional immunotherapy works by boosting the body's immune response to fight the cancer. Although not widely used, it has shown promise in treating NMSC. Some examples of intralesional immunotherapy are:

- Interferons: These proteins help the immune system and suppress tumor growth. Interferon alpha-2a and alpha-2b have been used to treat BCC, SCC, and KA.
- *Candida* Antigen: Repeated injections have successfully cleared BCCs in some cases.

Intralesional Photodynamic Therapy

Photodynamic therapy involves using a light-sensitive drug (often 5-aminolevulinic acid, methylaminolevulinate, or methylene blue) that is activated by light to destroy cancer cells. This treatment has been used successfully for cSCC.

Conclusion

There are multiple intralesional treatments available for NMSC that can be effective alternatives to surgery. These treatments can be especially useful if you or a loved one have/has other health conditions or when surgery might cause significant cosmetic or functional problems. Discussing these options with your physician can help determine the best treatment plan for your specific situation.

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