



EUROPEAN
ACADEMY OF
DERMATOLOGY &
VENEREOLGY

Information Leaflet
for Patients

Tattoos in Sun-Exposed Skin



The aim of this leaflet

This leaflet is intended for both the general public and tattoo artists to help them understand non-melanoma skin cancer risk in sun-exposed, tattooed skin, as well as to support early recognition of any changes in tattooed areas. It also provides guidance for individuals with sun-damaged skin or a history of skin cancer, to support informed and safer decisions regarding tattooing.

Tattoos in Sun-Exposed Skin

What are non-melanoma skin cancers?

Non-melanoma skin cancers are the most common type of cancer in people with fair skin. The most frequent types are basal cell carcinoma (BCC), followed by squamous cell carcinoma (SCC).

The main risk factor for these cancers is sun exposure or the use of tanning devices. Detecting skin cancer early is very important, because treatment at an early stage usually allows for a complete cure.

This can lead to:

- local inflammation
- formation of granulomas (clusters of immune cells) Contact eczema due to an aftercare product applied

When should I suspect having non-melanoma skin cancer on a tattoo?

It is important to note that current evidence does not suggest an increased risk of skin cancer in tattooed individuals.

You should see a dermatologist promptly if you notice:

- A new/growing lesion (plaque, nodule, tumor) pigmented or non-pigmented
- Lesion that bleeds after minor trauma
- Wounds or ulcers that do not heal after 3 weeks of local care

Early evaluation is important, as early detection allows for more effective treatment and better outcomes.

How is non-melanoma skin cancer diagnosed with a tattoo?

Most lesions suspected of skin cancer can be diagnosed even within a tattoo with clinical and dermoscopic examination. Dermoscopy is a quick,

non-invasive diagnostic method that allows a doctor to look at skin lesions under magnification. Skin cancers in people with tattoos can look different from those in the general population, because the tattoo ink may affect their appearance. Basal cell carcinomas have occasionally been reported to develop mostly on black, navy blue, or other dark-colored tattoos, while squamous cell carcinomas tend to appear more often on red tattoo pigment.

In case of doubt, a small portion of the lesion can be taken for histopathological evaluation during a biopsy procedure.

What is the treatment of a non-melanoma skin cancer on a tattoo?

The treatment of choice in most cases of BCC/SCC is surgical removal. This procedure is usually performed with local anesthesia. Depending on where the lesion is and how extensive the procedure needs to be, surgery may change the appearance of the tattoo. However, studies show that these changes usually have minimal impact on patients' perception of their tattoo. Most patients accept changes to their tattoo well, especially when the procedure is important for diagnosis and treatment. Early treatment is crucial to ensure the best possible outcome.

In selected cases other treatment regimen can be implemented, including scraping and cauterization procedure, cryotherapy (freezing treatment), laser therapy, topical medications, photodynamic therapy, radiotherapy or targeted cancer therapy.

While every effort has been made to ensure that the information given in this leaflet is accurate, not every treatment will be suitable or effective for every person. Your own clinician will be able to advise in greater detail.

Can I get a tattoo if I had a history of non-melanoma skin cancer?

Getting a tattoo can make clinical and dermoscopic diagnosis more difficult, especially if the tattoo covers a large area.

For this reason, doctors generally advise against getting tattoos, especially large or extensive ones, if you have a history of skin cancer. Although there are no official guidelines, research shows that tattoos can sometimes delay the detection of skin cancers, which may affect the outcome.

If you have had skin cancer in the past, you need long-term follow-up for two main reasons:

- To detect any new, independent skin cancers early
- To check the risk of the cancer coming back at the site of your scar or in nearby lymph nodes or other organs.

Can I get a tattoo on a scar after the excision of non-melanoma skin cancer?

Tattooing over a scar from a previously treated skin cancer should be considered on an individual basis. There is currently no published data specifically addressing the safety of tattooing in such cases. The decision depends on several factors, including the histological type of tumor, the extent and type of surgical treatment, and the time elapsed since treatment. In some cases, such as long-term remission after multiple recurrences, the risk-benefit assessment may be particularly complex. In all situations, it is essential to ensure that tattooing does not compromise clinical follow-up or the ability to detect potential recurrence.

How can I minimise the risk of developing a non-melanoma skin cancer on a tattoo?

Sun exposure remains a major risk factor for non-melanoma skin cancer. People with tattoos should be careful to protect their skin from ultraviolet (UV) radiation.

To minimise risk:

- Use broad-spectrum sunscreen with at least SPF 30 on all tattooed areas whenever you are outdoors.
- Reapply sunscreen every two hours, or more often if swimming or sweating.
- Wear protective clothing, hats, or sleeves to cover tattoos during long periods in the sun.
- Avoid intentional tanning with UV lamps or prolonged sunbathing.
- Regularly check your tattooed skin for any new or changing spots, bumps, or lesions.
- See a dermatologist promptly if you notice any unusual changes.

Following these steps helps protect your skin and reduces the risk of skin cancer, while also keeping your tattoo looking its best.

Can I get a tattoo if I have a higher risk of non-melanoma skin cancer?

Before getting a tattoo, it is important to consider your individual risk factors for skin cancer, especially if you are planning a large or extensive tattoo. People with higher risk should be very cautious about tattooing.

Some risk factors include:

- Frequent sun exposure due to professional activities (e.g., sailor, farmer, postal worker, construction worker, lifeguard);
- Frequent sun exposure due to hobbies (e.g., cycling, gardening);
- History of sunburns, especially

painful, red, peeling sunburns before age 18;

- Previous UV light treatments (e.g., phototherapy for psoriasis);
- Taking medications that lower immunity or having a chronic condition that weakens the immune system;
- Signs of sun damage on the skin;

General advice to patients with skin cancer risk who plan to get a tattoo

- Avoid large or extensive tattoos if you have multiple moles, a history of skin cancer, or other high-risk skin conditions.
- Check your tattooed skin regularly and see a dermatologist if you notice any new or changing spots, bumps, or lesions.
- Protect your skin and tattoos from the sun by using sunscreen, wearing clothing, and avoiding prolonged UV exposure.

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