3.14 Non-melanoma skin cancer

Epidemiology

Around three quarters of non-melanoma skin cancers are basal cell carcinomas. These metastasize only in exceptional cases, and particularly in the presence of a weakened immune system. As such, they are rarely life-threatening. However, they can grow into the surrounding tissue, for example into bone tissue, and thus can potentially impact quality of life in a considerable way. Almost a quarter of malignant non-melanoma tumours of the skin are squamous cell carcinomas. These two types of tumour most commonly affect the face, with this localisation accounting for around 40% of cases. Rare forms include Merkel cell carcinomas, which are neuroendocrine tumours, as well as dermatofibrosarcomas and carcinomas of the sebaceous and sweat glands. In 2016, an estimated 230,000 people in Germany were diagnosed with non-melanoma skin cancer; around 930 people died from the condition in 2017. As with malignant melanoma, incidence increased significantly with the introduction of skin cancer screening, and has stabilised recently. Although reliable international data are not as widely available in this case as they are for malignant melanoma, it is likely that the incidence of non-melanoma skin cancers has increased significantly in western industrialised nations over the past few decades.

Risk factors

Non-melanoma skin cancer is more commonly diagnosed among people with lighter skin types than those with darker skin types. The most important risk factor associated with this cancer is strong exposure of the skin to ultraviolet (UV) radiation. The type of source – be it the sun or artificial UV sources such as solariums – is not important. The risk of squamous cell carcinoma increases with the cumulative (life-long) dose of UV radiation.

In contrast, intermittent (recurring, intensive) UV exposure increases the risk of basal cell carcinomas. Patients who have already developed a basal cell carcinoma have an increased risk of developing further non-melanoma skin cancer. Non-melanoma skin cancer can also develop many years after exposure to arsenic; on skin that has been damaged by radiation (such as after radiation therapy) and due to immunosuppressive therapy, for example after an organ transplant.

In accordance with the guidelines on statutory screening, men and women are entitled to have their skin examined by a specially trained doctor (such as a dermatologist or general practitioner) every two years beginning at 35 years of age.
Figure 3.14.1
Age-standardised incidence and mortality rates by sex, ICD-10 C44, Germany 2006–2016/2017, projection (incidence) through 2020 per 100,000 (old European Standard)

Figure 3.14.2
Absolute and relative survival rates up to 10 years after first diagnosis, by sex, ICD-10 C44, Germany 2015–2016

Figure 3.14.3
Relative 5-year survival by histology and sex, ICD-10 C44, Germany 2015–2016

Figure 3.14.4
Age-specific incidence rates by sex, ICD-10 C44, Germany 2015–2016 per 100,000