

Melanoma Types and Staging

Melanoma is the third most common type of cancer diagnosed in Australia (Cancer Council Australia, 2019). Melanoma is a cancer that begins with a certain skin cell known as melanocytes (Cancer Australia, 2017). Melanocyte cells produce a brown pigment called melanin which gives the skin a brown colour (American Cancer Society, 2017). Melanin helps to protect the deep layers of the skin from the harmful exposure of the sun (Cancer Australia, 2017). With continuous and excessive amount of exposure to harmful elements such as the sun melanoma may form (SkinCancer.org, 2017). Melanoma can also be classified as malignant melanoma and cutaneous melanoma (Cancer Council, 2017). Almost all melanoma cells continue to produce melanin, so melanoma tumours frequently appear brown or black (American Cancer Society, 2017). However, certain melanomas do not make melanin and these tumours may appear pink, tan or even white in colour (American Cancer Society, 2017). Melanomas can arise anywhere on the body but more commonly on the chest, back, legs, neck and face (SkinCancer.org, 2017).

They can also form on other parts of the body such as the eyes, genitals, mouth and anal area but these are less common (American Cancer Society, 2017). Skins that are darkly pigmented (African American) have a lower risk of developing melanomas, however this group of people may develop melanoma under fingernails, soles of the feet and palms of the hands (Cancer Australia, 2017).

There are five types of melanomas:

Superficial spreading melanoma



Lentigo maligna



Acral lentiginous melanoma



Amelanotic melanoma



Nodular melanoma



Superficial spreading melanoma is the most common form of melanomas. It accounts for 70% of all cases of melanomas (Cancer Australia, 2017). This is commonly found in younger people. This form of melanoma grows on the top layer of the skin (American Cancer Society, 2017). It appears flat or as a slightly raised discoloured patch, either tan, black, red, blue or white in colour. This raised discoloured patch has an irregular border and is somewhat asymmetrical in the appearance (Cancer Research UK, 2017).

Lentigo maligna is very similar to the superficial spreading melanoma as it remains close to the skin surface. It appears flat or slightly elevated. The colour may look a blotchy tan, brown and or dark brown (American Cancer Society, 2017). This type is commonly found in elderly people that have had chronic sun exposure (Cancer Australia, 2017). It is usually found on the face, ears, back, chest and arms. If it becomes more advanced it is known as Lentigo maligna melanoma (Cancer Australia, 2017).

Acral lentiginous melanoma usually spreads superficially before penetrating into the deeper layers of the skin. It is different in its appearance to the previous melanomas discussed. It appears as a black spot or a brown discolouration under the nails, soles of the feet and palms. This type of melanoma is more often found on dark coloured skins and can become advanced much more quickly than the superficial melanomas (American Cancer Society, 2015).

Amelanotic melanomas are rare and hard to be diagnosed. They do not have melanin therefore they lack colour. They can appear pink, red or have a brown or grey edge.

Nodular melanoma is usually invasive when diagnosed. It is the most aggressive form of melanoma. They tend to grow downwards deeper into the skin. They appear raised and look either black, blue, grey, white, brown, tan red or skin tone in colour. This type of melanoma may not necessarily develop from a mole. It is often found in middle aged people either on their chest or back (Cancer Research UK, 2017).

Symptoms of melanomas: Sore that does not heal, spread of pigment from the border of a spot, redness or swelling beyond the border of the spot, change in sensation of the spot (itchy or painful) and change in the surface of the mole (oozing, bleeding and appears like a bump) (Cancer Australia, 2017).

Below will describe the different stages of the melanoma and the process of the disease by utilising the melanoma stage and the TNM stage.

Staging of melanoma is a process used to describe the amount of disease.

Melanoma stage:

0= The tumour is confined to the epidermis of the skin and has not reached the dermis.

IA= The tumour is 1 mm thick the skin is not ulcerated.

IB= The tumour is 1-2 mm thick and is ulcerated and has not spread to lymph nodes and organs.

IIA= The tumour is 1-2 mm thick and is not ulcerated or 2-4 mm and is ulcerated and has not spread to lymph nodes or organs.

IIB= The tumour is 2-4 mm thick and is ulcerated or more than 4 mm thick and no ulcerated and has not spread to the lymph nodes or organs.

IIC= The tumour is 4 mm thick and is ulcerated. These are aggressive and more likely to spread.

IIIA, IIIB and IIIC= The tumour maybe any thickness and maybe ulcerated or not. Has either spread to lymph nodes or surrounding tissues.

IV= The cancer has spread to lymph nodes and organs.

(Cancer Council Victoria, 2017).

Additional staging and the most common form of staging melanomas is the TNM (tumour, nodes and metastases):

T= Primary tumour and its thickness:

Tx= Tumour cannot be evaluated

TIS= Cancer confirmed to the outer surface of the skin.

T0= No evidence of a tumour

T1= Primary tumour depth is less than 1.0mm and with or no ulceration.

T2= Primary tumour depth 1.01-2.0mm with or no ulceration.

T3= Primary tumour depth 2.01-4mm with or no ulceration.

T4= Primary tumour depth is greater than 4mm with or no ulceration.

N= Regional lymph nodes containing or not containing cancer cells:

Nx= Lymph nodes cannot be evaluated.

N0= No evidence of cancer in the lymph nodes.

N1= Melanoma cells in 1 lymph node.

N2= Melanoma cells in 2-3 lymph nodes.

N3= 4 lymph nodes with melanoma cells or 2-3 lymph nodes stuck together.

M= Distant metastasis:

Mx= Metastasis cannot be evaluated.

M0= No evidence of melanoma metastases.

M1a= Melanoma has spread from primary site to other areas of the skin or under the skin and or lymph nodes.

M1b= Melanoma has spread to the lungs.

M1c= Melanoma has spread to any other organs with a normal lactate dehydrogenase.

(American Cancer Society, 2017).

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