

Disease Report #REP-202505-L1IR

Report Details

Report Number: REP-202505-L1IR

Date: 21 May 2025

Disease: Melanoma



Diagnosis and Recommendations

Health Report: Melanoma

1. Medical Description:

Melanoma is the most serious type of skin cancer. It develops from melanocytes, the cells

that produce melanin, the pigment that gives skin its color. Unlike other skin cancers, melanoma can spread (metastasize) quickly to other parts of the body if not detected and treated early. It can appear anywhere on the body, but is most common on sun-exposed areas. Melanoma is categorized by its depth (thickness) which is a key determinant of prognosis. Different subtypes exist, including superficial spreading melanoma (most common), nodular melanoma (rapidly growing), lentigo maligna melanoma (develops from a pre-existing lentigo maligna lesion), and acral lentiginous melanoma (occurs on palms, soles, and under nails).

2. Common Symptoms:

The ABCDEs of melanoma are a helpful mnemonic for recognizing potentially cancerous moles:

A – Asymmetry: *One half of the mole doesn't match the other half.*

B – Border: The edges are irregular, ragged, notched, or blurred.

C – Color: *The color is uneven and may include different shades of brown, tan, black, red, white, or blue.*

D – Diameter: The mole is larger than 6 millimeters (about the size of a pencil eraser), although melanomas can be smaller.

E – Evolving: *The mole is changing in size, shape, or color.*

Other symptoms may include:

Itching or tenderness

Bleeding or crusting

A sore that doesn't heal

A new pigmented lesion or a change in an existing one

3. Causes and Risk Factors:

The primary cause of melanoma is excessive exposure to ultraviolet (UV) radiation from sunlight or tanning beds. Other risk factors include:

Fair skin: People with light skin, hair, and eyes are at higher risk.

Family history: *Having a family history of melanoma increases your risk.*

Many moles: Having a large number of moles (nevi) or atypical moles increases risk.

Previous history of skin cancer: *Having had basal cell carcinoma or squamous cell carcinoma increases the risk.*

Weakened immune system: Individuals with compromised immune systems are more vulnerable.

Exposure to arsenic: *Occupational exposure to arsenic is a risk factor.*

4. Preventive Measures:

Limit sun exposure: Seek shade, especially during peak sun hours (10 a.m. to 4 p.m.).

Use sunscreen: Apply a broad-spectrum sunscreen with an SPF of 30 or higher liberally and frequently, even on cloudy days. Reapply every two hours or after swimming or sweating.

Wear protective clothing: Wear long-sleeved shirts, long pants, a wide-brimmed hat, and sunglasses when in the sun.

Avoid tanning beds: Tanning beds emit harmful UV radiation that significantly increases the risk of melanoma.

Regular self-exams: Conduct regular skin self-exams monthly to check for any new or changing moles.

5. Recommended Diagnostic Tests:

Visual examination: A dermatologist will visually examine your skin.

Dermoscopy: A non-invasive procedure using a dermatoscope to magnify and examine moles.

Biopsy: A small sample of tissue is removed and examined under a microscope to confirm the diagnosis. Types of biopsies include excisional, incisional, and shave biopsies.

Imaging tests (if melanoma is suspected): CT scans, MRIs, PET scans may be used to determine the extent of spread (metastasis).

Sentinel lymph node biopsy: This procedure helps determine if the cancer has spread to nearby lymph nodes.

6. Suggested Treatments and Medications:

Treatment depends on the stage of melanoma, its thickness, and location. Options include:

Surgical excision: Removal of the melanoma and a margin of surrounding healthy tissue. Wide local excision may be required for thicker melanomas.

Mohs surgery: A specialized surgical technique used for melanomas located in cosmetically sensitive areas.

Sentinel lymph node biopsy: Removal of the lymph node(s) most likely to receive cancer cells first.

Chemotherapy: Used to treat metastatic melanoma.

Targeted therapy: Drugs that target specific molecules involved in the growth of melanoma cells (e.g., BRAF inhibitors, MEK inhibitors).

Immunotherapy: Drugs that boost the body's immune system to fight the cancer cells (e.g., checkpoint inhibitors).

Radiation therapy: Used to control the growth of melanoma that cannot be surgically removed.

7. Lifestyle and Dietary Recommendations:

Maintain a healthy lifestyle: *A healthy diet rich in fruits, vegetables, and whole grains, regular exercise, and stress management can support overall health and potentially help your body fight disease.*

Avoid smoking: Smoking weakens the immune system and is linked to an increased risk of melanoma.

Hydration: Drink plenty of water to support overall health.

Disclaimer: This health report is for informational purposes only and should not be considered medical advice. Consult with a qualified healthcare professional for any health concerns or before making any decisions related to your health or treatment. Early detection and prompt treatment of melanoma are crucial for improving prognosis.