

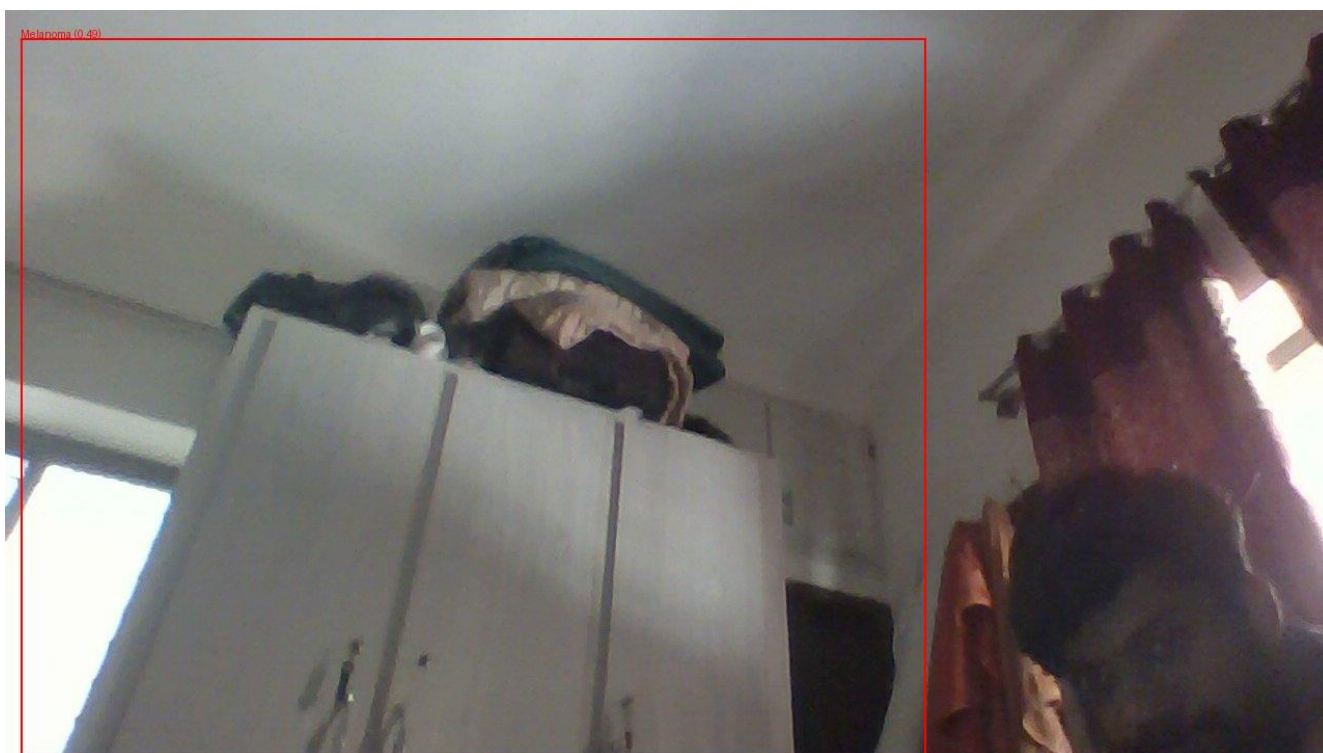
Disease Report #REP-202505-CNHQ

Report Details

Report Number: REP-202505-CNHQ

Date: 21 May 2025

Disease: Melanoma



Diagnosis and Recommendations

Melanoma: A Detailed Health Report

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 quickly to other parts of the body (metastasize) if not detected and treated early. It can occur anywhere on the body, but is most common on areas exposed to the sun, such as the back, legs, and face. Melanoma is classified into different subtypes based on its microscopic appearance, impacting prognosis and treatment strategies. These subtypes include superficial spreading melanoma, nodular melanoma, lentigo maligna melanoma, and acral lentiginous melanoma.

2. Common Symptoms:

Early detection is crucial for successful treatment. Be vigilant for changes in existing moles (ABCDEs of Melanoma) or the appearance of new lesions. Symptoms can include:

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, color, or elevation.*

Other symptoms, particularly in later stages, may include:

Itching or tenderness

Bleeding or crusting

A sore that doesn't heal

Darkening of the skin

3. Causes and Risk Factors:

The primary cause of melanoma is excessive exposure to ultraviolet (UV) radiation from sunlight or tanning beds. This damages DNA in melanocytes, leading to uncontrolled cell growth. Other risk factors include:

Fair skin, light hair, and light eyes: These individuals have less melanin to protect against UV damage.

Family history of melanoma: *A genetic predisposition increases risk.*

Many moles (especially atypical moles): A greater number of moles increases the chance of one becoming cancerous.

Weakened immune system: *Individuals with compromised immune systems are more*

susceptible.

Exposure to arsenic: Occupational or environmental exposure.

Previous history of sunburn: Severe sunburns, especially during childhood, significantly increase risk.

4. Preventive Measures:

Limit sun exposure: Seek shade during peak sun hours (10 am to 4 pm), especially during summer months.

Wear protective clothing: Cover exposed skin with long sleeves, long pants, and a wide-brimmed hat.

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 more often if swimming or sweating.

Avoid tanning beds: Tanning beds emit high levels of UV radiation and significantly increase the risk of melanoma.

Regular self-skin exams: Check your skin monthly for any changes in moles or new lesions. Consult a dermatologist if you notice anything suspicious.

5. Recommended Diagnostic Tests:

Visual examination: A dermatologist will visually examine your skin for suspicious moles or lesions.

Dermoscopy: This non-invasive procedure uses a special magnifying lens to examine the mole in detail.

Biopsy: A small tissue sample is removed and examined under a microscope to confirm the diagnosis. This is the definitive diagnostic test.

Imaging tests (if melanoma is suspected): These may include CT scans, MRI scans, and PET scans to determine the extent of the spread (metastasis).

6. Suggested Treatments and Medications:

Treatment depends on the stage of the melanoma, its location, and the patient's overall health. Options include:

Surgical excision: Removal of the melanoma and a margin of surrounding healthy tissue. This is the primary treatment for early-stage melanoma.

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

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

sensitive areas.

Radiation therapy: Uses high-energy radiation to kill cancer cells.

Chemotherapy: *Uses drugs to kill cancer cells.*

Targeted therapy: These drugs target specific proteins involved in cancer cell growth.

Immunotherapy: *These treatments help your immune system fight cancer cells.*

Biologic therapy: Treatment with medication to control or destroy cancer cells

7. Lifestyle and Dietary Recommendations:

Maintain a healthy diet: *A balanced diet rich in fruits, vegetables, and whole grains supports overall health and immune function.*

Avoid smoking: Smoking increases the risk of melanoma and other cancers.

Manage stress: *Chronic stress can weaken the immune system.*

Regular exercise: Physical activity promotes overall health.

Adequate hydration: Drink plenty of water.

Disclaimer: This information is for general knowledge and does not constitute medical advice. Always consult with a qualified healthcare professional for diagnosis and treatment of any medical condition. Early detection and prompt treatment are crucial for improving outcomes in melanoma.