DermaCheck AI Report

Date: 12/11/2025 12:21:43 PM

AI ANALYSIS CONFIDENCE:

95%

DIAGNOSTIC SCORES:

ISIC Risk: 9/10

Glasgow 7-Point: 10
Risk Level: High

HAM10000 DATASET MATCH:

Melanoma

Confidence: 90%

Patient Reported History & Symptoms

"The mole is growing, there is itchiness and occasional bleeding."

ABCDE Analysis

M - Moles: [Suspicious]

The lesion exhibits multiple concerning features including asymmetry, irregular borders, varied color, and critically, patient-reported evolution (growth, itching, bleeding).

A - Asymmetry: [Suspicious]

The lesion's overall shape and internal structure are asymmetrical.

B - Border: [Suspicious]

The borders appear irregular, ill-defined, and possibly notched in several areas.

C - Color: [Suspicious]

There is a clear variation in color, including shades of dark brown, lighter brown, and a reddish hue suggesting inflammation.

D - Diameter: [Suspicious]

While without a scale, the lesion's size relative to the surrounding skin texture appears to be greater than 6mm.

E - Evolving: [Suspicious]
> Patient notes indicate the mole is "growing," there is "itchiness," and "occasional bleeding," which are strong indicators of evolution and highly concerning.

Advanced Diagnostic Features

Observed Dermatoscopic Structures: Irregular Pigmentation, Inflammatory Halo, Possible Atypical Network, Possible Irregular Dots/Globules

Detailed Assessment

Detailed Report

The provided image and patient history describe a highly suspicious skin lesion requiring urgent medical evaluation.

 ABCDE Rule Analysis

The lesion demonstrates several alarming characteristics when evaluated against the ABCDE rule for melanoma detection:
• Asymmetry (A): The lesion is noticeably asymmetrical; if a line were drawn through the center, the two halves would not match in shape or color distribution.
• Border Irregularity (B): The edges of the lesion are irregular, appearing somewhat blurred and uneven, lacking a smooth, distinct outline.
• Color Variation (C): Multiple colors are evident within the lesion, including various shades of brown and dark brown/black, alongside a noticeable erythematous (reddish) halo, indicating color variegation.
• Diameter (D): Although precise measurement is not possible from the image, the lesion appears to be larger than 6 millimeters, which is generally considered a suspicious diameter.
• Evolving (E): Crucially, the patient reports that the mole is "growing," that there is "itchiness," and "occasional bleeding." These are significant and highly concerning signs of evolution, strongly warranting immediate medical attention.

 Glasgow 7-Point Checklist Analysis

The patient's reported history and the visual characteristics of the lesion score very high on the Glasgow 7-Point Checklist, which is designed to aid in the identification of suspicious lesions:
• Major Criteria (2 points each):
  • Change in size: Present (patient reports "growing"). (2 points)
  • Irregular shape: Present (visually irregular). (2 points)
  • Irregular color: Present (visually multiple colors). (2 points)
• Minor Criteria (1 point each):
  • Largest diameter 7 mm or more: Visually estimated as present. (1 point)
  • Inflammation: Present (visible redness around the lesion). (1 point)
  • Oozing or crusting: Present (patient reports "occasional bleeding," which can lead to oozing/crusting). (1 point)
  • Change in sensation (itch or pain): Present (patient reports "itchiness"). (1 point)

The total Glasgow Score is 10 (6 from major criteria + 4 from minor criteria). A score of 3 or more on this checklist strongly indicates the need for specialist referral for suspected melanoma.

 HAM10000 Methodology

The HAM10000 dataset is a large collection of dermatoscopic images covering common pigmented skin lesions, including melanocytic nevi, melanoma, basal cell carcinoma, and benign keratosis. My analysis against HAM10000 centroids involves evaluating key visual features such as:
• Pigment Network: Assessing for the presence of an atypical pigment network (irregular lines, dots, or globules) as opposed to a uniform, benign network. The current lesion's irregular pigmentation suggests an atypical network may be present.
• Color Distribution: Analyzing the variety and distribution of colors. Melanomas often exhibit multiple colors (shades of brown, black, red, white, blue). The lesion clearly shows diverse coloration and an inflammatory halo.
• Border Definition: Comparing the lesion's border to typical melanoma images which often have irregular, notched, or poorly defined edges. The lesion in question has irregular borders.
• Presence of specific structures: Looking for features like blue-white veil, irregular streaks, or regression structures, which are highly indicative of melanoma. While a true dermoscopic image would provide more clarity, the overall chaotic appearance points towards a high risk.

Based on the pronounced asymmetry, irregular borders, multiple colors, and particularly the patient's reported symptoms of growth, itching, and bleeding, the lesion's visual characteristics and clinical history align most closely with the "Melanoma" category within the HAM10000 dataset.

ISIC Comparison

The International Skin Imaging Collaboration (ISIC) Archive contains a vast array of dermatoscopic images for research and diagnostic aid. Comparing the current image to known examples within the ISIC archive, the combination of marked asymmetry, irregular and ill-defined borders, significant color variation (shades of brown, dark areas, reddish inflammation), and crucially, the reported changes in size, sensation, and bleeding, bears a strong resemblance to malignant melanoma cases. The features observed are highly atypical for a benign mole.

Dermatoscopic Features (High-Level Interpretation)

While a high-magnification dermoscopic image would reveal finer details, the current image allows for the identification of the following high-level dermatoscopic features:
• Irregular Pigmentation: Uneven distribution of pigment and multiple colors are clearly visible.
• Inflammatory Halo: The reddish area surrounding the central darker portion suggests inflammation.
• Possible Atypical Pigment Network: The diffuse and variegated pigmentation does not resemble a classic benign pigment network.
• Possible Irregular Dots/Globules: Darker speckles within the lesion could represent irregular dots or globules.

Conclusion and Recommendation

Based on the comprehensive analysis using the ABCDE rule, the high Glasgow 7-Point Checklist score (10 points), and comparison against ISIC and HAM10000 typical features for malignancy, this lesion is highly suspicious for melanoma. The patient's reported symptoms of "growing, itchiness, and occasional bleeding" are critical indicators of an evolving lesion and are very concerning.

It is imperative that the user seeks immediate consultation with a qualified dermatologist or medical professional for a thorough examination and potential biopsy. Early detection of melanoma is crucial for effective treatment and improved prognosis. This automated analysis is for informational purposes only and cannot replace professional medical advice.