

The 10th International Medical Congress For Students And Young Doctors

## 1. ANOMALOUS 12MM MELANOMA

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**Introduction.** Despite its relatively low frequency, melanoma is considered the most hazardous form of skin cancer. It manifests as a developmental atypia of melanocytes, cells derived from the neural crest. Frequent sites of melanomas are on the trunk in males and the lower limbs in females. They often present as asymmetrical lesions on the skin surface that can infiltrate the underlying tissue. Factors influencing melanoma development include skin immunity, genetic predisposition, environmental elements (UV radiation), and lifestyle variables. Misdiagnosis or underdiagnosis of melanoma can occur, potentially leading to delayed treatment and severe complications.

**Case statement.** We report a case of an 86-year-old man admitted to the Surgery Department for a dorsal cutaneous tumor. After surgical excision, a round-ellipsoidal cutaneous flap with 8mm of subcutaneous tissue was admitted. Macroscopic examination revealed a brown nodular proliferation with a gray, irregular, and imprecisely delimited surrounding area. The histological examination revealed an ulcerating epithelioid nodular melanoma infiltrating the hypoderm with a substantial thickness of 12mm. The tumor presented an increased mitotic index of 69 mitoses/10HPF, brisk tumor-infiltrating lymphocytes (TILs), both horizontal and vertical proliferation, and a pagetoid migration pattern. Immunohistochemistry revealed a high proliferation index of Ki67 in 60-70% of the tumoral cell population, along with intense positivity for anti-S100, SOX10, Melan A, and HMB45 antibodies.

**Discussions.** Histological and immunohistochemical investigations were crucial in reaching the final diagnosis of an ulcerated epithelioid nodular melanoma. The Breslow index, measuring the maximum thickness of the tumor, was determined to be 12 mm. The tumor was classified as Clark V stage, indicating infiltration into the hypoderm, and assigned a pT4bNxMx stage. The comprehensive analysis of histological features, immunohistochemical markers, and genetic testing contributes to a more accurate diagnosis and aids in developing an appropriate management plan for the patient.

**Conclusion.** Atypical cases of melanoma, although sporadic, play a crucial role in advancing our understanding of this pathology. In cases such as the one described, where the conventional outlines are exceeded, reporting becomes essential.

