Melanoma Subtypes: Findings From a Multidisciplinary Intergroup

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Melanoma is a cancer that develops in melanocytes; its subtypes are characterized by different biological behaviors. We examined 204 biopsy specimens of primary cutaneous melanoma from patients who received a diagnosis of melanoma over 52 months (2009- April 2013). We found that the predominant subtype is Superficial Spreading Melanoma (SSM; n=63), followed by Nodular Melanoma (NM; n=39). Lentigo maligna (LM, in situ) and Lentigo maligna melanoma (LMM, invasive) are observed in 9.3% (n=19). Rare variants (n=3) were entirely Spitzoid. In 80 (39%) melanomas no particular feature was described (NOS- not otherwise specified melanoma). SSM is diagnosed mainly in women (M/F= 0.47), at a mean age of 50 years with a mean thickness of 0.7mm: low mitotic rate (1.1 mm²) and ulceration (9.5%) are reported; a tumor regression is observed in 76.2% of cases. NM characterizes the thickest melanomas (4.1mm), with high mitotic rate (5/mm²) and ulceration (66.7%). Vascular invasion (18%) is specific of this histotype with a low rate of tumor regression (7%): the advanced and metastatic melanomas (n=4) of our population are NMs. LM/LMM occurs in older women (71.5 years; M/F=0.6). LMM is generally a very thin (0.28mm), slow progressive lesion with no ulceration nor mitosis observed. In conclusion, NM co-aggregates with adverse prognostic factor (vascular invasion and microsatellitosis) so it tends to present as advanced disease. It credibly represents a distinct molecular subtype of melanoma and not only an advanced thicker tumor, as it was believed.