**LETTER TO THE EDITOR**

# IMP-3 expression in nevi and melanoma: There is still no light at the end of the tunnel?

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**There is no conflict of interest!**

What is new in the diagnosis and treatment of melanoma and other melanocytic potentially dangerous lesions? We would like to focus the attention on the interesting and independent preliminary findings, considering the expression of IMP-3 in small groups of benign, dysplastic melanocytic lesions and melanomas, reported most recently by some authors [1], which showed the following expression pattern: IMP-3 positive expression in 4 of the 10 melanomas (40%) and in 2 of 10 dysplastic nevi (20%), while no expression was observed in the benign nevi. This observation supports the important new statement that IMP-3 could be a useful marker for the differentiation between benign and dysplastic nevi or melanoma, but it is still not a useful marker for distinguishing the dysplastic nevi from melanoma, since an expression has been observed in both of them [1]. IMP-3 is generally considered as an oncofetal protein, as a remarkable overexpression of IMP-3 has been recently reported in association with different neoplasms, including malignant melanoma, as its important prognostic value, is highlighted [2].

It is already confirmed that IMP-3 promotes migration and invasion of melanoma cells by modulating the expression of HMGA2 [3]. Subsequently, it could be postulated that its expression in dysplastic nevi will be associated with a more rapid progression to melanoma, as if so, these patients should be monitored more frequently, as a potential risk group of patients, especially when the expression is observed in dysplastic nevi in the frame of FAMMM syndrome or atypical mole syndrome [4].

The current data suggests that IMP-3 may play a key role as a marker for more rapid progression of the cancer genesis, as all of the nevi, which expressed the marker, should be early eradicated surgically in order to prevent the rapid progression to melanoma.

The IMP-3 expression is not a useful marker with prognostic ability in melanomas, while the expression is usually associated with advanced stages of the disease (III/IV), where the prognosis is poor in general. In contrast, it could be a marker with a great value in preventing the progression of dysplastic nevi which shows positive expression, as an additional screening test.

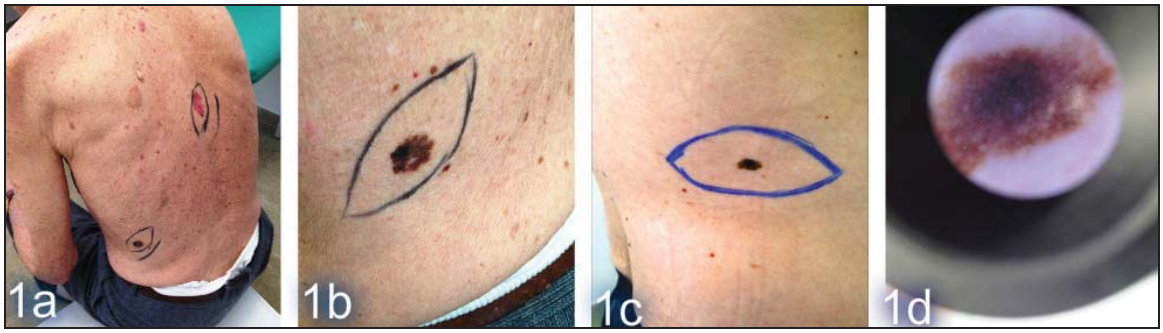


**Fig 1a:** Clinical manifestation of a patient with superficial spreading melanoma and suspected Morbus Bowen
**Fig 1b:** SSM localized on the back of the same patient, resection lines, preoperative findings. Thin melanomas may not express the marker IMP-3, which is associated possibly with their better prognosis in general
**Fig 1c:** Patients with superficial spreading form of melanoma. Lack of expression of IMP-3 in lesional tissue
**Fig 1d:** Dermatoscopic findings of a patient with superficial spreading melanoma: the presence of atrophic areas and oval impaired melanocytic network. Lack of expression in the superficial spreading melanomas should be interpreted more as a positive phenomenon

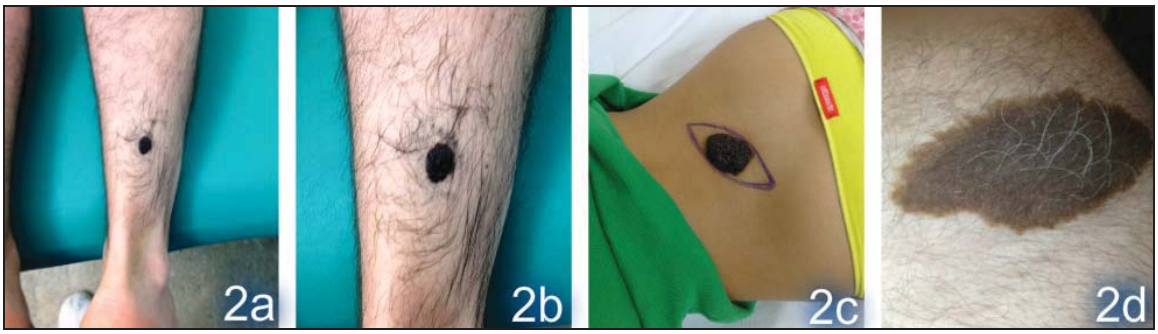


**Fig 2a:** Patient with dysplastic nevus, localized in the dorsal part of his leg. Clinically suspicious lesion for cutaneous melanoma
**Fig 2b:** Patient with dysplastic nevus, localized in the dorsal area of his leg. The positive expression of IMP-3 in patients with dysplastic nevi and the absence of such expression in patients with thin melanomas of the skin is somewhat confusing. Probably only in some or certain histologic variants of nevi and melanomas the IMP-3 expression is and could be of importance in the frame of the processes that promote the carcinogenesis (nodular melanomas, acral lentiginous forms and melanomas with high metastatic potential)
**Fig 2c:** Congenital melanocytic nevus on the lower back area in young female patient
**Fig 2d:** Congenital melanocytic nevus on the medium site of the hip

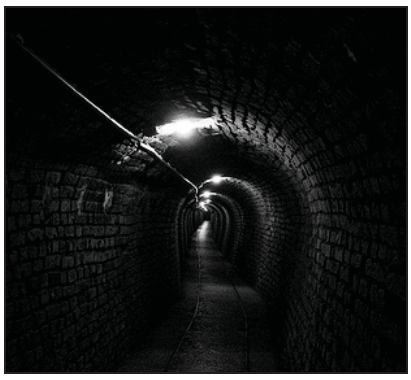

**Fig 3:** IMP-3 expression. There is still no light at the end of the tunnel

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