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MELANOMA ON TATTOOS: TWO CASES ILLUSTRATING POSSIBLE FORTUITOUS ASSOCIATION

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Introduction: The potential carcinogenic effects of tattoos and tattoo inks remain unclear. We report 2 cases of melanoma occurring on tattoos in Finnish patients.

Case reports:

Patient 1. In June 2006, a 61-yo male presented with an superficial spreading melanoma with nodular evolution (Breslow thickness 15 mm) on the right thigh overlying an old tattoo. Examination, full body CT scan and sentinel lymph node were normal. No relapse had occurred before 2009, after which no information was available.

Patient 2. In may 2012, a 32-yo male presented with a 1,3 cm non-ulcerated superficially spreading type melanoma (Breslow thickness 0,4 mm) on the upper back within a large black tattoo performed a couple of years earlier. A one-millimetre mole pre-existed before tattooing and gradually changed during the following years. The patient has been symptom-free for 6 months.

Discussion: Approximately 50 cases of skin cancers have been reported on tattoos, including 15 melanomas. The pathogenesis of a melanoma on a tattoo does not seem to differ from a melanoma on plain skin. Several studies have stressed the presence of potential carcinogenic or pro-carcinogenic products in tattoo inks. However, the prevalence of tattoos and melanoma increase in the population. Most of the reported melanomas developed on dark tattoos. Tattoos may play a role in melanoma growth, by masking the clinical malignant modifications and delaying the diagnosis, rather than by a true and direct carcinogenic effect.

Conclusion: The association between melanoma and tattooing remains fortuitous thus far. Tattoos can delay the clinical diagnosis of a melanoma.