O37. BLACK TATTOOS, PAPULO-NODULAR REACTIONS AND HIGH RISK OF SARCOIDOSIS

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Aim: It is well known that sarcoidosis is more prevalent among patients with tattoo reactions. In a systematic study we investigated the association between tattoo reactions and sarcoidosis.

Methods: During a period from 2008-2015 a total group of 494 tattoo complications in 406 patients were examined in a subspecialized dermatological clinic. Based on clinical assessment and histology, 92 reactions in 72 patients showed a papulo-nodular pattern. Since sarcoidosis is expected to be nodular this group was further examined for sarcoidosis; locally and systematically.

Results: Of 92 papulo-nodular reactions, 27 (29%) reactions in 19 patients were diagnosed as local or systemic sarcoidosis. This was supported by histology. 65 (71%) were diagnosed as non-sarcoidosis. A new observation the "Rush phenomenon" with concomitant reaction, "rush", in many other black tattoos, triggered by a recent tattoo with papulo-nodular reaction, was observed in 70% in the sarcoidosis group and 28% in the non-sarcoidosis group, indicating a predisposing factor which may be autoimmune and linked to sarcoidosis. In the predisposed individual, agglomerates of black pigment forming foreign bodies, may trigger widespread reactions in the skin and internal organs.

Conclusions: The association between black tattoos, papulo-nodular reactions and sarcoidosis was strong. Sarcoidosis is estimated to be 500 fold increased in patients with a papulo-nodular reaction in a tattoo, compared with the prevalence in the general population. Depending on individual predisposition papulo-nodular reactions may, as triggers, induce widespread reactions in other black tattoos, a "rush phenomenon".

Info: Title (article): Papulo-nodular reactions in black tattoos as markers of sarcoidosis Study of 92 tattoo reactions from a hospital material

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