



CONTACT DERMATITIS AND OCCUPATIONAL DERMATOSES

## POST-INFLAMMATORY HYPOPIGMENTATION DUE TO FERROUS SULPHATE: A CASE REPORT.

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**Background:** The differential diagnosis between post-inflammatory hypopigmentation (PIH), chemical leukoderma (CL) and vitiligo is difficult. We report a case of PIH erroneously diagnosed as vitiligo.

**Observation:** A 59-year-old man was referred to our phototherapy center with a diagnosis of vitiligo and the prescription for doing a narrow-band ultraviolet B (NB-UVB) phototherapy cycle. The patient had multiple, confluent macules of depigmentation that covered the scalp, the trunk, the shoulders, the hands. One month before, during the mowing of the lawn, one week after having sprinkled it with undiluted ferrous sulphate powder, he had experienced the onset of an erythematous rash firstly located at the exposed areas, subsequently interested some covered parts of the trunk. After 10 days, depigmented macules appeared in the areas interested by the rash. The patient had negative medical history. A punch biopsy from a depigmented skin area demonstrated absence of melanocytes. To promote the skin repigmentation the patient started to apply tacrolimus 0,1 % ointment once a day for 6 months and NB-UVB phototherapy two times a week for 3 months. Six-month follow-up showed maintenance of the repigmentation.

**Key message:** The clinical data of our patient suggested the diagnosis of vitiligo-like PIH, secondary to ferrous sulphate irritant contact dermatitis. PIH is an acquired loss of skin pigmentation occurring after cutaneous inflammation. Iron is an extracellular stress and ferrous sulphate, if used as such, is an irritant. The vitiligo-like picture is more frequent in cases of CL, after repeated contacts with melanocytotoxic substances. PIH appears after a single exposure to a pathogenic noxa, preceded by an inflammatory pattern. It's necessary to stress the patient with the anamnesis for identifying the cause, that sometimes is not so evident because a lot of chemicals can be irritant to the skin if misused.

