

## Psoriasis and Vitiligo: An Association or Coincidence?

Caius Solovan<sup>1</sup>, Anca E Chiriac<sup>2</sup>, Tudor Pinteala<sup>2</sup>, Liliانا Foia<sup>2</sup> and Anca Chiriac<sup>3\*</sup>

<sup>1</sup>University of Medicine and Pharmacy "V Babes" Timisoara, Romania

<sup>2</sup>University of Medicine and Pharmacy "Gr T Popa" Iasi, Romania

<sup>3</sup>Apollonia University, Nicolina Medical Center, Iasi, Romania

\*Corresponding author: Anca Chiriac, Apollonia University, Nicolina Medical Center, Iasi, Romania, Tel: 00-40-721-234-999; E-mail: [ancachiriac@yahoo.com](mailto:ancachiriac@yahoo.com)

Rec date: April 21, 2014; Acc date: May 23, 2014; Pub date: May 25, 2014

Citation: Solovan C, Chiriac AE, Pinteala T, Foia L, Chiriac A (2014) Psoriasis and Vitiligo: An Association or Coincidence? Pigmentary Disorders 1: 106. doi: 10.4172/jpd.1000106

Copyright: © 2014 Solovan C, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

### Letter to Editor

Sir,

The worldwide occurrence of psoriasis in the general population is about 2–3% and of vitiligo is 0.5-1%. Coexistence of these diseases in the same patient is rarely reported and based on a pathogenesis not completely understood [1].

Sandhu et al. [1] in 2004 reported a retrospective study of 4,700 patients with psoriasis. Among the 4,700 patients with psoriasis, 38 (0.8%) patients had associated vitiligo.

In Italy in 2009 a retrospective study was done on 712 patients with vitiligo. From the 712 vitiligo patients, 21 (3%) had associated psoriasis [2].

A retrospective analysis was performed in Romania on 1236 persons diagnosed with psoriasis between January 1, 2004, and December 31, 2011. A clinical examination on each patient was done and medical records were collected. Diagnosis of psoriasis was confirmed by dermatological examination and/or punch biopsy.

A detailed dermatological examination was done for evidencing other skin diseases at the moment of clinical inspection or in the past of the patient, referred by declaration and/or medical reports.

Of 1236 psoriasis patients 26 (2.10%) reported skin diseases and only 10(0.80%) vitiligo. (Tabel1)

Vitiligo	10	0.80%
Alopecia areata	2	0.16%
Dermatomyositis	3	0.24%
Rosacea	3	0.24%
Keratosis pilaris	2	0.16%

Dermatitis herpetiformis	1	0.08%
Chronic urticaria	2	0.16%
Lyell syndrome	1	0.08%
Quincke edema	1	0.08%
Acne	1	0.08%

Table 1: Medical Report

The results of our study do not confirm an association between psoriasis and vitiligo, the coexistence of the two very common diseases is related to chance alone.

Both diseases have an underlying immune-inflammatory pathogenesis centered by dendritic cells which are pluripotent with respect to their functions. These cells induce a selective differentiation and proliferation of Th 1 and Th17 lymphocytes implicated in psoriasis; on the other hand similar dendritic cells (Langerhans cells) are implicated in inducing a cytotoxic effect on melanin producing cells resulting in vitiligo. Usually these pathways are genetically determined and linked to each other: psoriasis, rheumatoid arthritis, diabetes, lupus and some neurodegenerative diseases. In some cases the pathways cross themselves and, dependent on the environment, the manifestations are psoriasis or vitiligo. One may forget that both diseases can be trauma induced (Koebner phenomenon).

### References

1. Sandhu K, Kaur I, Kumar B (2004) Psoriasis and vitiligo. J Am Acad Dermatol 51:149-150
2. Percivalle S, Piccinno R, Caccialanza M (2009) Concurrence of vitiligo and psoriasis: a simple coincidence? Clin Exp Dermatol 34: 90-91.