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Letter to Editor

The kaleidoscope of autoimmunity: A report of 10 cases of multiple autoimmune syndrome

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Dear Sir,

Multiple autoimmune syndrome has been defined as the coexistence of at least three autoimmune disorders in a single patient.[1] Dermatological autoimmune disorders, especially vitiligo, take a special seat in the setting of multiple autoimmune syndrome.^[2] There is strong evidence to suggest that the various autoimmune disorders have a common origin and share similar pathophysiological mechanisms. Therefore, the presence of one autoimmune disorder in an individual makes him/her susceptible to the development of other autoimmune disorders.[3] Herein, we report 10 cases of multiple autoimmune syndrome that presented to the dermatology department of our hospital.

The patients' details are shown in [Table 1]. Females made up majority of the cases in our series with seven patients while there were only three male patients. The age of the patients ranged from 19 to 60 years. Seven patients had three autoimmune disorders, two patients had four, and one patient had five coexisting autoimmune disorders. Autoimmune thyroid disease was the most common disorder in our case series which was present in seven patients. The diagnoses of vitiligo, psoriasis, alopecia areata, and lichen planus were confirmed with clinical examination and dermoscopy along with histopathological examination. In addition to these, specific antibody testing was carried out for systemic sclerosis, systemic lupus erythematosus, pemphigus vulgaris, and bullous pemphigoid. Triiodothyronine, tetraiodothyronine, thyroid-stimulating hormone, and antithyroid peroxidase antibody levels were carried out for autoimmune thyroid disease while fasting blood glucose, serum insulin levels, and serum C-peptide levels were measured for type 1 diabetes mellitus. The diagnosis of rheumatoid arthritis was based on clinical, radiological, and immunological testing.

Disorders with an autoimmune pathogenesis occur with increased frequency in patients already suffering from another autoimmune disease. [4] The term polyautoimmunity has been proposed for this association of autoimmune disorders. This term also encompasses the probable common origin of these disorders.^[5] Multiple autoimmune syndrome showcases the kaleidoscope of autoimmunity with at least three autoimmune disorders being present in a single patient. The presence of one autoimmune disease should alert one to watch for presence or subsequent development of another one.

To sum up, this study indicates that autoimmune hypothyroidism, type 1 diabetes mellitus, and rheumatoid arthritis are the most common systemic associations of the autoimmune dermatological disorders. Hence, a patient presenting with features of skin autoimmunity must be investigated for these conditions.

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Table 1: Characteristics of the patients.				
S. No.	Age (in years)	Gender	Diseases	Family history of autoimmune diseases
1.	32	Male	Alopecia areata, vitiligo, type 1 diabetes mellitus, autoimmune thyroid disease	Autoimmune thyroid disease
2.	26	Female	Alopecia areata, systemic sclerosis, autoimmune thyroid disease	-
3.	19	Male	Alopecia areata, vitiligo, lichen planus, type 1 diabetes mellitus, autoimmune thyroid disease	Alopecia areata
4.	34	Female	Systemic lupus erythematosus, rheumatoid arthritis, autoimmune thyroid disease	Autoimmune thyroid disease
5.	53	Female	Alopecia areata, vitiligo, psoriasis	-
6.	47	Male	Type 1 diabetes mellitus, vitiligo, psoriasis	-
7.	48	Female	Systemic sclerosis, autoimmune thyroid disease, pemphigus vulgaris	Psoriasis
8.	51	Female	Systemic lupus erythematosus, vitiligo, autoimmune thyroid disease	-
9.	60	Female	Bullous pemphigoid, type 1 diabetes mellitus, rheumatoid arthritis	-
10.	49	Female	Autoimmune thyroid disease, vitiligo, psoriasis, type 1 diabetes mellitus	-

Declaration of patient consent

Patient's consent not required as patient's identity is not disclosed or compromised.

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Conflicts of interest

There are no conflicts of interest.

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