

Guida Santos<sup>1</sup>Lourdes Sousa<sup>1</sup>DOI: <http://dx.doi.org/10.1590/abd1806-4841.20142403>**CASE REPORT**

A 31-year-old male presented oral lichen planus and alopecia areata of the barb and legs that appeared 6 months before. He had also been suffering from acrofacial vitiligo since the age of 18, Crohn's disease for 4 years and psoriasis vulgaris for 2 years (Figures 1 and 2). His family history was positive for vitiligo (mother and brother) but negative for psoriasis and other autoimmune diseases. Analytically, no changes were detected (HCV negative, thyroid function and B12 were in the normal range).

**DISCUSSION**

Multiple autoimmune syndrome (MAS) is a rare condition, described by Humbert and Dupond in 1988 and defined by the association of at least three autoimmune diseases in the same patient.<sup>1-5</sup> Its pathogenesis is still unknown.<sup>1</sup> About 25 percent of patients with autoimmune diseases have a tendency to develop additional autoimmune disorders.<sup>5</sup> MAS can be classified into three groups according to the preva-

lence of their association with one another: Type 1 comprises myasthenia gravis, thymoma, polymyositis and giant cell myocarditis; Type 2 includes Sjögren's syndrome, rheumatoid arthritis, primary biliary cirrhosis, scleroderma and autoimmune thyroid disease and Type 3 groups together autoimmune thyroid disease, myasthenia and/or thymoma, Sjögren's syndrome, pernicious anemia, idiopathic thrombocytopenic purpura, Addison's disease, insulin-dependent diabetes, vitiligo, autoimmune hemolytic anemia, systemic lupus erythematosus and dermatitis herpetiformis.<sup>2,3,4,5</sup> Other conditions can be found in various combinations. This classification helps in detecting a new condition liable to appear in a patient with two previous autoimmune diseases.<sup>1-5</sup>

Multiple autoantibodies can be found and some of the specific mono- or polyclonal autoantibodies may be multiple organ reactive.<sup>6</sup> Psoriatic patients were found to have higher rates of Inflammatory Bowel Disease.<sup>7</sup> The association between psoriasis and



**FIGURE 1:** (A)&(C) Vitiligo of the face, (B) vitiligo and psoriasis of the hands, (C) alopecia areata of the barb and vitiligo, (D) lichen planus

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**FIGURE 2:** (a), (c-d): Psoriasis patches on the elbow and the legs, (c) Koebner phenomenon with linear psoriasis patch on the abdomen, (c-d): alopecia areata of the lower limbs

vitiligo is also well-documented, with a prevalence of 2.07%-3.06%.<sup>8</sup>

In multiple autoimmune syndrome, patients often have at least one dermatological condition, usually vitiligo or alopecia areata<sup>1,2</sup> and the former is most frequently involved.<sup>9</sup>

A common mechanism with T lymphocytes as a Th1 immune mechanism seems prevalent in all of these conditions. As vitiligo was the first autoimmune disorder to appear in our patient, it could provide a basis for analysis of the pathophysiological mechanisms of autoimmunity. There is also a potential

mechanism for association of three of these skin diseases, known as the Koebner phenomenon.<sup>8</sup>

The rarity of this case is highlighted by the coexistence of four autoimmune dermatoses in association with Crohn's disease, never described in the literature. Only the coexistence of three dermatoses (lichen planus, psoriasis, and vitiligo) is reported. The occurrence of multiple autoimmune phenomena indicates the need for continued monitoring for the development of new autoimmune disease in predisposed patients. □

**Abstract:** Multiple autoimmune syndrome is a rare condition, described by Humbert and Dupond in 1988. It is defined by the association of at least 3 autoimmune diseases in the same patient. Vitiligo is the most common skin condition in this syndrome. This article presents the case of a 31-year-old male with vitiligo, alopecia areata, Crohn's disease, psoriasis vulgaris and oral lichen planus. The rarity of this case is highlighted by the coexistence of four autoimmune skin diseases in association with Crohn's disease, never described in the literature.

**Keywords:** Alopecia; Alopecia areata; Autoimmune diseases; Crohn's disease; Lichen planus, oral; Psoriasis; Vitiligo

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