

Myasthenia gravis and psoriasis vulgaris

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ABSTRACT

يعتبر الوهن العضلي اضطراب مناعي ذاتي نادر الحدوث بشكل نسبي، والذي فيه تتشكل الأجسام المضادة ضد ناقلات استيل كولين نيكوتين بعد المشبك عند الحقن العضلي العصبي. يعتبر الصدف الشائع مرض جلدي التهابي مزمن ومعاود. كما يعتبر الوهن العضلي والصداف الشائع من الأمراض ذاتية المناعة وهي مرتبطة بجينات مضادة بشرية محددة. نستعرض في هذا التقرير حالة لمريضة تبلغ من العمر 53 عاماً تعاني من الوهن العضلي مصاحب للصداف الشائع. في الختام، يعتبر هذا الارتباط شديد الندرة وكان يعتقد أن أسباب المرض تعتمد على الاضطراب العام للمناعة.

Myasthenia gravis is a rare autoimmune disorder in which antibodies form against acetylcholine nicotinic postsynaptic receptors at the myoneural junction. Psoriasis vulgaris is a chronic, recurring, and an inflammatory skin disease. Myasthenia gravis and psoriasis are both autoimmune diseases and correlated with specific human histocompatibility antigens. In this report, a 53-year-old woman who has myasthenia gravis accompanied with psoriasis vulgaris is presented. To conclude, this association is extremely rare and the pathogenetic etiology was thought to depend on a generalized immunological disturbance.

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least severe in the morning and worse as the day progresses.^{2,3} Skin lesions including psoriasis, pemphigus, vitiligo, and alopecia areata developing due to immunological factors may accompany MG.^{4,5} Pemphigus and vitiligo have been well documented in MG, however, alopecia areata and psoriasis have been rarely described.²⁻⁶ Millions of people are affected by autoimmune diseases throughout the world. There are more than 80 autoimmune disease types and rheumatoid arthritis, discoid lupus, Addison's disease, multiple sclerosis, type 1 diabetes mellitus, inflammatory bowel disease, Hashimoto's thyroiditis, Graves disease, MG, psoriasis, and alopecia areata are the most familiar ones.⁵ In this study, we present the clinical and laboratory findings of a 53-year-old-woman with very rarely seen psoriasis and MG association in which the etiopathogenesis is thought to be related to generalized immunologic disorder.

Case Report. A 53-year-old woman was diagnosed with MG (Osserman IIa) and developed right semi ptosis and diplopia 18 years ago. Electromyographic investigations were consistent with MG. The ACh receptor antibody level was found high [34 nmol/L (reference interval; <0.5)] and thorax CT showed a soft tissue mass with an axial diameter of 4 x 2.5 cm colored by contrast material in the thymus localization, and interpreted as thymoma of the anterior mediastina. Thymectomy was performed, and pathological examination of the thymus was consistent with lymphocyte-weighted thymoma. The patient, still on 180 mg/day pyridostigmine therapy and without any complaint developed edema and red color change in the fifth digital interphalangeal joint, consistent with arthritis, followed by erythematous and squamous papule plaques spreading to the whole body, and diffused erythematous and squamous papules in the hairy skin 4 years ago. The skin biopsy revealed hyperkeratosis in the epidermis, Munro microabscesses in the striatum corneum, decrease in granular layer, Civatte bodies with rare edema, papillary dermis, and perivascular eosinophil infiltration in the upper dermis. These findings were evaluated as psoriasis vulgaris. She had taken intermittent methotrexate 12.5 mg/day because of this disease and her complaints had prominently improved, however, the skin lesions had increased in the recent period. On physical examination, diffused erythematous and squamous papule plaques over the whole body and

Myasthenia gravis (MG), is a rare autoimmune disease characterized by occurring autoantibodies against postsynaptic nicotinic acetylcholine (ACh) receptors at the neuromuscular junction.¹ The severity of clinical findings, weakness, ptosis, diplopia, and bulbar signs, fluctuates during the day, usually being



Figure 1 - Diffused erythematous and squamous papule plaques covering the whole body.

erythematous and squamous papules in the hairy skin were present (Figure 1). Neurological examination revealed bilaterally semi ptosis prominent in the left, facial diplegia, and 4/5 tetraparesis in proximal muscle groups. Examination of other systems was normal. Laboratory tests; total blood count, sedimentation, electrolyte, liver enzymes and other biochemical tests, hemoglobin electrophoresis, thyroid function tests, anti-thyroglobulin antibody, anti-microsomal antibody, folate, iron, ferritin, iron binding capacity, and vitamin B12 levels were normal. Rheumatic factor, anti nuclear antibody, anti DNA, lupus erythematosus cell, and hepatitis markers were negative. Antistreptolysin O and C reactive protein were normal. Control thorax CT was normal. She was given 77.5 mg/day methotrexate. Excipial lypolotion, Pirdolin shampoo, Claritin tablet, cutivate ointment + Vaseline mixture were administered. The pyridostigmine dose was gradually increased (300 mg/day).

Discussion. Myasthenia gravis (MG) is an autoimmune disease characterized by fluctuating weakness of voluntary muscle groups such as eye, face, chewing, swallowing, and shoulder and hip muscles. In this disease, autoantibodies against postsynaptic ACh receptors occur. A decrease in the numbers of ACh receptors causes progressive weakness due to prolonged use of affected muscles. The prevalence of MG is 50-125/million and the incidence is 1/300,000. The most common age at onset is the second and third decades in women, and the sixth and seventh decades in men. Rarely, familial cases can be encountered.⁷ Psoriasis is a skin disorder characterized by well-defined patches of red raised skin called plaques, with flaky silvery white scales on top of the plaques with a benign chronic course showing improvements and attacks. The cause of psoriasis is not known exactly.⁸⁻¹⁰ Although the etiopathogenesis has not been described well, most of the findings support an autoimmune origin and abnormal keratinocyte proliferation mediated by T lymphocyte is suspected, especially in patients who have a genetic tendency.⁸⁻¹¹ The disease is clinically seen in 2 types as pustular and nonpustular psoriasis (psoriasis vulgaris). Nonpustular psoriasis (psoriasis vulgaris) effects most of the patients. Therefore, generally, psoriasis vulgaris is purposed when psoriasis is presented. Psoriasis can be seen at any age from birth to old age, however, the most common age of onset is the third decade.⁸⁻¹¹ In our case, diffused erythematous and squamous papule plaques over the whole body and erythematous and squamous papules in the hairy skin were present and had developed at 49-years-old. The onset age of the disease is one of the atypical features of our case. According to our literature review, our patient is the third case reported

with MG and psoriasis vulgaris,^{6,12} and due to the rarity of this condition, we wanted to draw attention to this association.

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