

Transient Acantholytic Dermatitis (Grover's Disease) in a Bulgarian Patient Associated With Idiopathic Low-Grade Thrombocytopenia: First Description in the Medical Literature!

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Received: July 17, 2019; Accepted: July 23, 2019; Published: July 26, 2019

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Abstract

Grover's disease is a transient acantholytic dermatosis that usually disappears within a few weeks, but it can also be presented as a persistent variant with a duration of more than 3 years. The etiology of this disease is not entirely clear and possible causes include viral infections, drug reactions (BRAF inhibitors and allogeneic haematopoietic stem cell transplantation). In terms of treatment, topical and systemic steroids, oral vitamin A and PUVA therapy are described. We present a 79-year-old man with a 1-month complaint for a recurring, highly itchy, blistering rash on the skin of the upper limbs, back and chest. During the clinical examination, there was an erythemo-papulo-vesicular polymorphic rash, in places with xerosis areas, engaging the upper part of the trunk, as the initial data and subsequent histopathological verification data spoke undoubtedly in direction of acantholytic dermatosis or Grover's disease. During hospitalization, systemic antihistamine and topical steroid therapy was performed. Subsequently, ambulatory therapy with Acitretin 20 mg /daily per os and Methylprednisolone aceponate 0.1% x 2 / daily topically was given with a good therapeutic response. We believe that this case seems to be the first officially documented case of Morbus Grover associated with idiopathic low-grade thrombocytopenia.

Key words: Morbus Grover; Idiopathic thrombocytopenia; Acitretin; Prednisolone; PSA

Introduction

By definition, Grover's disease is a transient acantholytic dermatosis that is clinically characterized by the appearance of papules or papulovesicles mainly on the trunk and most commonly affecting men between 40 and 50 years [1-3]. The definition of "transient" disease emanates from the fact that the disease usually disappears within weeks or has a duration less

than three months [2,3]. However, the likelihood of long-term clinical manifestation (more than three years) in the context of persistent dermatosis, as a variant of transient acantholytic dermatosis, is also indicated [4].

Case Report

We present a case of a 79-year-old man who was hospitalized on a 1-month complaint for a recurrent, severe itchy, blistering rash on the upper limbs, back and chest (Fig.1a- 1f). The patient suffers from arterial hypertension and benign prostatic hyperplasia for which he accepts Bisoprolol 5 mg (1/2-0-0), Acetylsalicylic acid 75 mg (0-0-1), Alfuzosine hydrochloride (0-0-1) and Finasteride 5 mg (0-0-1). During the dermatological examination the presence of erythemo-papulo-vesicular polymorphic rash was identified, with areas of xerosis, which involved the upper part of the trunk (Fig. 1a- 1f). Clinically, the data were indicative for acantholytic dermatosis or Grover's disease. Additionally, a blue- like lesion, located in presternal area was observed, clinically suspected for nevus blue (Fig. 1e). Paraclinical data have shown the presence of thrombocytopenia ($118.0 \times 10^9/l$), lymphocytopenia (19, 6%), granulocytosis (74,3%), elevated uric acid ($440.0 \mu\text{mol/l}$) and triglycerides levels ($1,8\text{mmol/l}$), and an increased rate of erythrocyte sedimentation (30mm/h). A skin biopsy was taken as the histological study showed evidence of acantholytic dyskeratosis, intraepidermal vesicular dermatitis, and confirmed the initial diagnosis, namely Grover's disease Fig 2. Due to anamnestic data of elevated PSA levels in the past ($19,94\text{ng/mL}$) there was a doubt about a paraneoplastic Grover's disease. Urologic consultation and PSA control (4.32 ng/mL) was conducted, as a result of which



Figure 1: Clinical aspect: erythemo-papulo-vesicular polymorphic rash, with livid color, located on the back (a, f), lateral part of the trunk (b), chest and abdomen (b, c, e), in places with areas of xerosis. In presternal area a blue-like lesion is observed, clinically suspected for nevus blue (e).

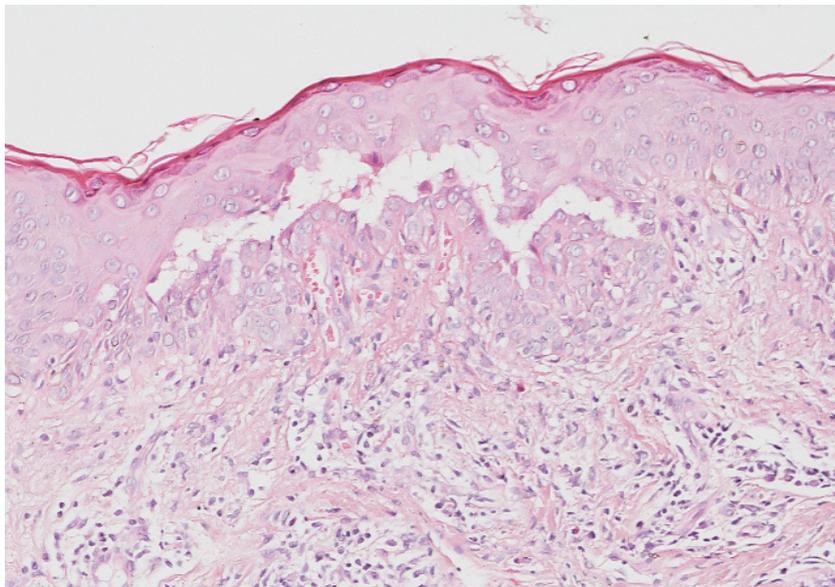


Figure 2: Intraepithelial clefting with acantholysis. Slight infiltrate with few eosinophils.x200, Histopathology performed by Prof Dr Michel Tronnier, Hildesheim, Germany, 2019.

the presence of prostate cancer was excluded. In connection with thrombocytopenia, a hematologist was consulted with the conclusion that it was a low-grade thrombocytopenia without the need for treatment. During the hospitalization systemic therapy with Desloratadine 5mg/day was performed and Flumetasone pivalate / Neomycin sulphate x1/ daily was topically administered. After dehospitalisation, treatment with Acitretin 20 mg / day per os and Methylprednisolone aceponate 0.1% x 2 / daily topical, under ambulatory conditions was initiated.

Discussion

The pathogenesis of Grover's disease has not been fully elucidated and currently, etiologically, viral infections, drug reactions (under treatment with BRAF inhibitors such as vemurafenib or dabrafenib) as well as allogeneic haematopoietic stem cell transplantation (AH SCT) are reported as possible causes [1, 5, and 6]. Histologically, the disease is characterized by 4 different acantholytic patterns, namely Darier-like type, Hailey-Hailey-type, pemphigus (vulgaris or foliaceus) -type, or spongiotic-acantholytic type. It is possible to observe a certain histological subtype, but in most cases two or more of these patterns is found [2-3].

Although in most cases the disease is presented as a benign and self-limiting condition it is possible to observe forms of extensive or atypical Grover's disease [7]. In these patients, immunosuppressant is believed to play a key role [7].

According to the prevailing part of the literature data, Grover's disease is very often combined with other dermatological and non-dermatological conditions, therefore histological examination is considered to be of primary importance for distinguishing other concomitant disorders [1]. This is most relevant to extensive forms of Grover's disease, due to the fact that underlying malignancy,

including hematopoietic malignancies, is often observed in these cases and the possibility of mistaken initiation of corticosteroid or immunosuppressive therapy should be avoided [5,7]. Currently, treatment options for transient acantholytic dermatosis include the administration of topical and systemic adrenal steroids, high doses of oral vitamin A with satisfactory results or PUVA therapy [8].

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