Drug Induced (Acetylsalicylic Acid/ASS) Pityriasis Lichenoides Chronica: First Report In The Medical Literature!?

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Abstract

According to the literature data, pityriasis lichenoides chronica (PLC) can also be considered as a drug-induced disease among many other possible causes, e.g. parainfectious! Currently, the following medications are described as possible triggers among drugs: antidepressants and statins, adalimumab, HMG-CoA reductase inhibitors, pemetrexed and infliximab. We present a 82-year-old man with ischemic cerebral infarction on the occasion of which he accepts acetylsalicylic acid 100mg (0-0-1) since December 2018. According to the patient, immediately (or about 2 months) after starting medication with acetylsalicylic acid, he observed raised itchy lesions on the skin of the trunk. During the dermatological examination, presence of disseminated erythemo-papulous, partially lichenoid lesions, excoriations and fine desquamation was established on the skin of the trunk and the extremities. Possibility for pityriasis lichenoides chronica, parapsoriasis small plaque form or lichen planus was considered. A skin biopsy was taken, and histological examination revealed evidence for pityriasis lichenoides chronica. Due to the suspicion for drug induced pityriasis, acetylsalicylic acid treatment was discontinued and replaced with clopidogrel. After a period of 6 weeks, we observed a good clinical response and reversal of the skin symptoms. We present the first case of acetylsalicylic acid induced PLC think the conclusion with certainty is not possible. Only the disappearance after change of medication does not prove the induction by ASS. In case of recurrence of the skin changes after reexposure with ASS could prove the causative role of ASS. Patients with this type of disease should be closely monitored because of the possibility for development of lymphoproliferative disorders.

Key words: Drug induced dermatosis; Parapsoriasis; ASA; Pityriasis lichenoides;

Introduction

The etiology of pityriasis lichenoides chronica (PLC) has not yet been fully elucidated [1]. Diagnosis is often difficult, and in most cases clinical data are not sufficient, so it is confirmed on the basis of histopathological results [2]. The theories that are being considered regarding PL genesis, include both infectious and drug-related hypersensitivity reactions versus lymphoproliferative disorder [3].

Case Report

We present a 82-year-old man with arterial hypertension, ischemic cerebral infarction, left-sided hemiparesis, ischemic heart disease and congestive heart failure. On the occasion of the brain stroke (December 2018) he is taking acetylsalicylic acid 100mg (0-0-1). The patient was hospitalized for a complaint about raised itchy lesions with a duration of about 2 months (after starting treatment with aspirin) [Figure 1a- 1f]. In the framework of the dermatological examination, on the skin of the trunk and the extremities, we found the presence of disseminated erythemo-papulous, partially lichenoid lesions with a clear border of the healthy skin, in places accompanied by excoriations, fine desquamation and strong itching [Figure 1a- 1f]. According to anamnestic data, the patient observed the onset of skin changes immediately (or about 2 months) after starting medication with acetylsalicylic acid 100mg. Based on the clinical data in differential diagnosis, the possibility of pityriasis lichenoides chronica [figure 2], parapsoriasis small plaque form or lichen planus was considered. Systemic therapy with desloratidine 0.5 mg x 1 / daily per os was initiated, as well as local clotrimazole 1% cr. therapy x 2 / daily on the occasion of the parallel established gluteal mycoses. Prophylactically, nadroparin calcium x 0.4 ml / day s.c. was applied. A skin biopsy was taken, and histological examination revealed evidence of mild anastomosis of the epidermis, hyper- and parakeratosis, infiltrate was very mild (not lichenoid, no interface changes), extravasated red blood cells histology, fitting to an older lesion of PLC [figure 2]. Because of the suspicion for medication-triggered pityriasis, after consultation with cardiologist and neurologist, acetylsalicylic acid intake was discontinued and replaced with clopidogrel 75mg (0-0-1). In addition, the intake of vinpocetine 10mg (1-1-
0) was determined. After dehospitalisation, ambulatory therapy included desloratidine 0.5mg x 1 / daily per os, pimecrolimus 1% 15g cr. x 2 / daily topically for 2 months as well as local hydration therapy. We observed a good clinical response and a gradual reversal of the skin symptoms over a period of 6 weeks.

**Figure 1a-1f:** Clinical finding: presence of disseminated erythema-papulous, partially lichenoid lesions, in places accompanied by excoriations and fine desquamation, located on the skin of of the trunk and the extremities.

**Figure 2:** Acanthosis of the epidermis with hyperkeratosis, in part parakeratosis. Few neutrophils within the stratum corneum. The superficial dermis shows extravasated red blood cells but no significant inflammatory infiltrate. No necrotic keratinocytes.
Discussion

There are literature data describing cases according to which the PLC can be assigned to the group of drug-induced diseases. At present, as inducers of pityriasis lichenoides chronica among the drugs are listed antidepressants and statins, adalimumab, HMG-CoA reductase inhibitors, pemetrexed and infliximab [1 and 4-7]. It is even described a case of a patient who had infliximab treatment for Crohn’s Disease, subsequently replaced by aldimumab, followed by the appearance of pityriasis lichenoides chronica [after the second injection] [8]. We add another medication to the list of drugs, describing the first case of possible pityriasis lichenoides chronica induced by acetylsalicylic acid. The pathogenesis of this type of induction and the pathway by which it is generated is not clear, but according to some authors the process is defined as a form of T-cell dyscrasia albeit one that is reversible [5]. Currently, there is no specific treatment for pityriasis lichenoides, and therapeutic options include topical corticosteroids, topical immunomodulators, systemic antibiotics (tetracycline, erythromycin) and phototherapy [2, 9]. Regarding treatment in the case of drug-induced PLC, it is believed that after discontinuation of the drug, reversal of the process should be observed [1, 4]. However, successful treatment with methotrexate is pointed out, especially in the case of adalimumab induced PLC [4, 8].

It is recommended that patients with PL should be closely monitored due to the existing risk for occurrence of lymphoproliferative disorders [2]. Some authors describe also an atypical form of PL, showing overlapping features with mycosis fungoides (MF) and lymphomatoid papulosis [10].

Conclusion

We could say that we presented the first case of pityriasis lichenoides chronica triggered by acetylsalicylic acid.

References