

Successful treatment of refractory prurigo nodular with abrocitinib

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Abstract

Key clinical message

Prurigo nodularis is always resistant to the conventional treatments. Based on the results, we would like to draw a conclusion that Abrocitinib as an inhibitor of Jak is a promising choice for the treatment of prurigo nodularis.

Key Words

Prurigo nodularis, itching, JAK inhibitor, abrocitinib

Conflict of interest statement

The authors declared that they have no conflicts of interest to this work.

We declare that we do not have any commercial or associative interest that represent a conflict of interest in connection with the work submitted.

Patient Consent Statement

Written informed consent was obtained from the patient to published this report in accordance with the journal's patient consent policy.

Prurigo nodularis (PN) is a chronic skin disease that manifests with severe itchy, firm, hyperkeratotic nodules distributed on the trunk and the extremities symmetrically. The treatment of prurigo nodularis(PN) has always been a great challenge for dermatologist. Here we report a case of refractory PN successfully treated with selective Janus Kinase 1(JAK1) inhibitor abrocitinib.

A 46-year-old man presented with visible dark bown nodules on the face, ears, hands and back neck for 2 years (Figure1). The patient complained of itchy skin all day especially at night that affects his night sleeping quality heavily. More important it occurs on visible sites such as the face and hans, which has profound psychosocial impacts on him. Laboratory evaluation of routine blood test, thyroid fuction , liver and kidney fuction tests, HIV, syphilis test and the serum total IgE levele showed normal. The patient

denied a personal history of allergic rhinitis, asthma, infantile eczema and other systemic disease, and also denied a family history of allergies and photosensitivity.

Therefore, a diagnosis of non-atopic PN was made.. At first we gave oral prednisolone 30mg daily and compound clobetasol propionate ointment twice daily. After 1-month treatment Visual Analogue Scale(VAS) decreasing from 9 to 3. The 2-month prednisolone dose is given 20mg daily. After 2 month above treatment, the itching was obviously relieved. But the patient gain 5Kg, especially the facial swelling is obvious. We have to stop the treatment. Therefore, thalidomide 50mg twice daily was prescribed concomitantly with high potency topical corticosteroids. Unfortunately, the treatment was interrupted again due to dizziness. Because the patient is a driver he can not concentrating on driving. As a result, the lesions aggravated with even more severe pruritus and VAS rising to 10. The patient refused to use those medicines with strong side effects but could not bear expenses of dupilumab. Therefore abrocitinib 100mg daily was prescribed. The pruritus markedly improved in 3 days with peak VAS decreasing from 10 to 3. Sustained effectiveness was achieved after 2 month treated with only a few nodules and mostly pigmentation on above area. Abrocitinib treatment was well tolerated.

Abrocitinib is an oral small molecule inhibitor of Janus kinase 1(JAK1) for the treatment of moderate-to-severe atopic dermatitis(AD). The reported success cases of tofacitinib[1] and baricitinib [2] for PN both demonstrate the effectiveness of the Jak inhibitor for the treatment of PN. So we choose abrocitinib to treat this patient, it has also shown great efficacy.

Therefore, Abrocitinib as an inhibitor of Jak is a promising choice for the treatment of PN, especially those patients who are resistant to conventional treatments or can not afford dupilumab.

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Figure1 clinical images of the back neck, ears and hands at week 0(A1-D1) and after abrocitinib treatments at week 8(A2-D2).

AUTHOR CONTRIBUTIONS

Fang Sun: Conceptualization; data curation; writing.

Zhenzhen Wu: Conceptualization; investigation; resources; writing

