The use of antivirals in severe or recalcitrant cases of pityriasis rosea: A case series

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INTRODUCTION

Pityriasis rosea (PR) is an exanthematous eruption that most often occurs in adults during the springtime, often after an upper respiratory infection. PR can be divided into 6 different forms, including classic, relapsing, persistent, pediatric, pregnancy-associated, and PR-like drug eruption.[1,2] It has been well documented in the literature that human herpesvirus (HHV) 6 and HHV-7 have been detected in PR plaques and patients' peripheral blood via polymerase chain reaction.[3] Although the plaques of PR are generally asymptomatic or only mildly pruritic, symptoms may include severe pruritus or an associated burning sensation.[2] In most cases, the eruption heals on its own in 6 to 8 weeks, with monitoring being the most common treatment, but can last for several months without treatment.[1,2] However, when symptoms are severe or the eruption persists and continues to spread, treatment options to date have included topical emollients, topical corticosteroids, antihistamines, antibiotics (particularly various macrolides), phototherapy, and antivirals, such as acyclovir.[4] Although antivirals have been shown to be effective, specifically acyclovir, they may be an underused treatment option. Antivirals for severe or recalcitrant PR are relatively inexpensive, safe alternatives that may yield significant benefits in managing patients with this condition. In support of the use of antivirals, particularly for more severe and recalcitrant cases, we report 3 cases that were successfully treated with either valacyclovir or acyclovir.

Abbreviations used:

PR: pityriasis rosea
HHV: human herpesvirus

CASE SERIES

Patient 1 is a 40-year-old healthy woman who presented with a 6-day history of a severely pruritic eruption on her back that later spread. Before this, she saw her primary care provider, who prescribed her triamcinolone acetonide 0.1% cream but noticed no improvement, and an initial dermatologist, who prescribed hydroxyzine 10 mg tablets and instructed her to follow up if her symptoms persisted. On initial examination, a 3-cm plaque with a trailing collarette of scale on the left lateral aspect of the back as well as scattered erythematous papules and plaques over the chest, back, and abdomen were noted. A diagnosis of PR was made. The patient was reassured and recommended to continue symptomatic treatment for pruritus with hydroxyzine as needed. Unfortunately, the rash continued to spread to involve the face with an associated burning sensation, prompting her to return to the clinic 4 days later. On subsequent examination, there were an increased number of plaques on the posterior neck, chest, abdomen, and flanks, with no involvement of the palms and soles (Fig 1). The clinical impression was still most consistent with PR. The Treponemal antibody test was negative. She was prescribed valacyclovir 1 g 3 times daily for 7 days in conjunction with triamcinolone acetonide 0.1% cream to be applied twice daily, the latter she opted not to use. To note, a 10-day course of doxycycline was prescribed simultaneously for acne flare. We followed up via telephone within 24 hours of treatment, and the patient reported almost immediate improvement in symptoms. At her 2-week follow-up, she noted significant improvement in her cutaneous findings (Fig 1).

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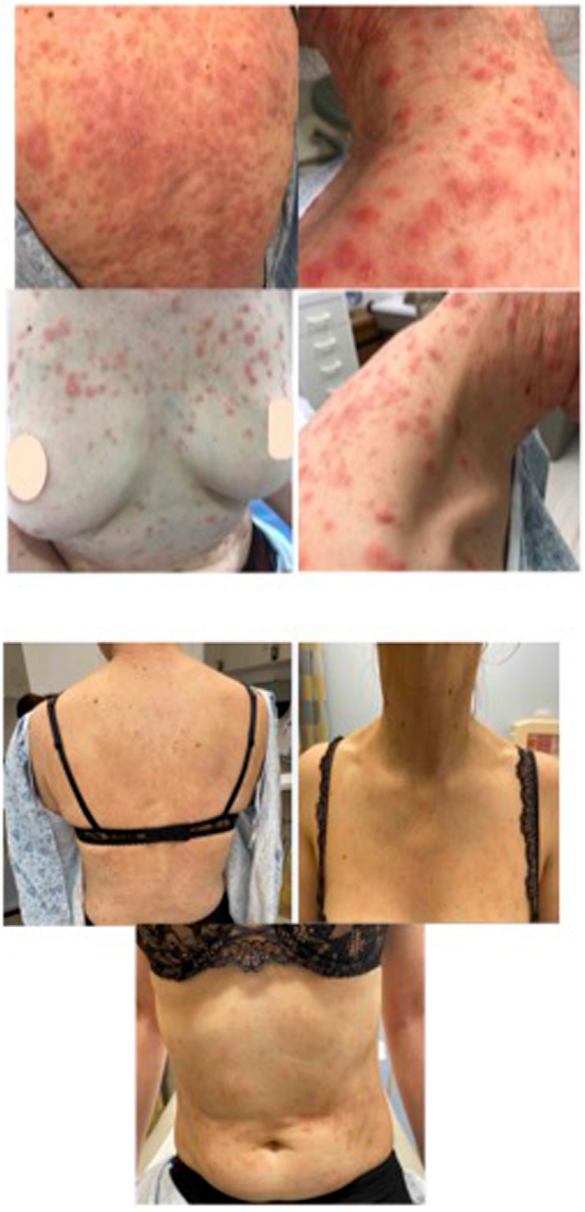

Fig 1. Patient 1 before treatment versus 2 weeks after treatment.

Patient 2 is a 30-year-old healthy woman who presented with a 1-week history of persistent but asymptomatic eruption that began on the buttocks before spreading to the trunk and extremities. She had not undergone any treatments and only reported the use of a new body wash around the time of rash onset. On examination, pink oval patches with a collarette of scale were noted on the upper portion of the back, with a larger patch on the left buttock that was most consistent with a herald patch (Fig 2). The clinical impression was most consistent with PR. She was prescribed oral valacyclovir 1 g 3 times daily for 1 week in addition to topical triamcinolone acetonide 0.1% cream to be applied twice daily as needed until clear. At her 2-week follow-up, she reported completing both the treatments, with very little use of the topical steroid, with significant improvement noted. On examination, she had a few scattered brown patches on her abdomen, which is consistent with postinflammatory hyperpigmentation (Fig 2).

Patient 3 is a 24-year-old healthy woman who presented with a 3-week history of a pruritic eruption that began on the right side of her back and subsequently spread to involve her chest, abdomen, and thighs. She reported a trial of over-the-counter calamine lotion and Benadryl with no improvement in her symptoms. On examination, pink oval patches with a collarette of scale were noted on the trunk and extremities, with a patch on the right midback that was most consistent with a herald patch (Fig 3). The clinical impression was most consistent with PR. She was prescribed oral valacyclovir 1 g 3 times daily for 1 week in addition to topical triamcinolone acetonide 0.1% cream to be applied twice daily for up to 2 weeks per month as needed. At her 3-week follow-up, she reported completing both the treatments, with significant improvement within 2 to 3 days of taking the oral valacyclovir. At that time, she noted complete clearance with some darker discoloration remaining at the sites of previous PR patches. On examination, she had residual postinflammatory hyperpigmentation (Fig 3).

DISCUSSION

This case series highlights the potential utility of antivirals (valacyclovir and acyclovir) in treating PR rather than nonintervention even though it is a self-resolving disease. All 3 patients had worsening symptoms or significant body surface area involvement, requiring them to seek treatment. Although it is plausible that all the patients would have undergone self-resolution in the same time frame, they all noted a dramatic improvement after the initiation of the medication, and they all had quicker resolution than the typical time course of 6 to 8 weeks.

The pathogenesis of PR has been linked to the systemic reactivation of HHV-6/7 in all types of PR, except the PR-like drug eruption. Although other viruses have been suspected, the most widely accepted viral etiology is still HHV-6/7.[3,5,6] PR during pregnancy can have significant implications for the fetus, including premature delivery, neonatal hypotonia, and even fetal demise.[7] Antivirals, particularly acyclovir, have been demonstrated to be more effective than placebo, possibly because of their action against HHV-6/7.[4,5,8,9] It is noteworthy that although acyclovir is the most commonly mentioned

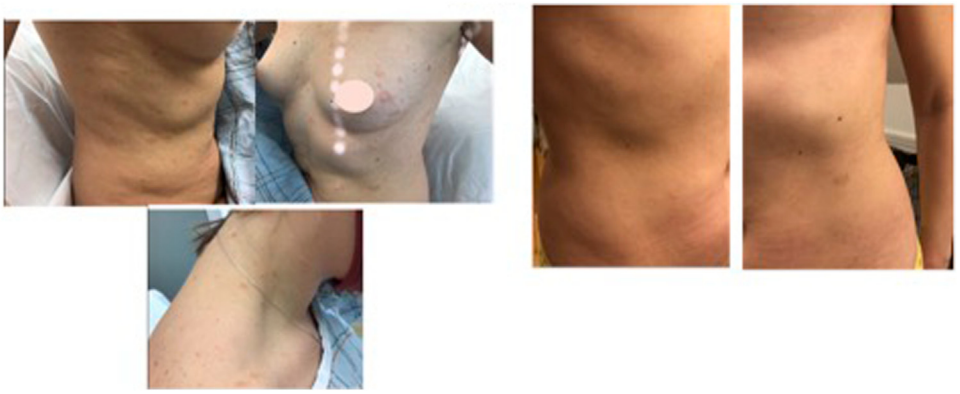

Fig 2. Patient 2 before treatment versus 2 weeks after treatment.

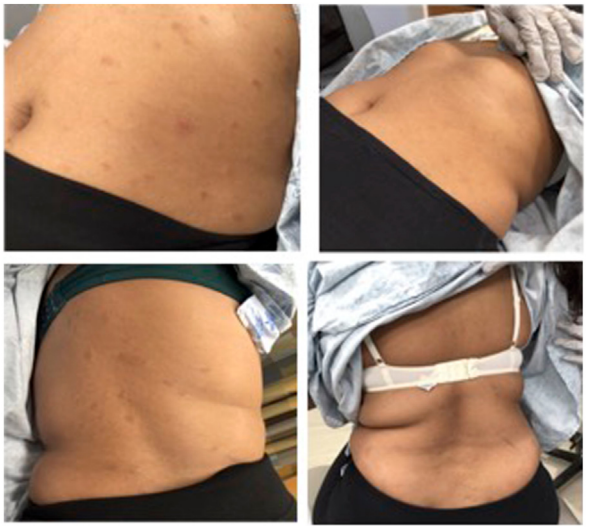

Fig 3. Patient 3 before treatment versus 3 weeks after treatment.

antiviral in the literature, 3 of our 4 patients received valacyclovir with an equally significant improvement. We utilized valacyclovir because it has higher bioavailability and requires less frequent dosing.[10] Both acyclovir and valacyclovir are considered pregnancy category B drugs in the previous categorization system, and, thus, their use in PR during pregnancy is likely safe and may lead to improved outcomes for the fetus.

Symptomatic treatment options for PR often include oral antihistamines, topical corticosteroids or topical calamine, and possibly phototherapy.[3] Although treatment with oral antihistamines or topical corticosteroids/calamine alone does not seem to impact the trajectory of the eruption, these were shown to improve symptoms such as pruritus.[3] Phototherapy with narrow-band UV-B has also been proposed as a possible treatment option; however, this may require 3 sessions per week for at least 1 month,[4] which would be inconvenient and costly for many patients. Thus, although these options remain important and cost-effective adjuncts for the treatment of PR, these may not adequately halt the spread of the eruption.

Although antivirals have been shown to have efficacy and alter the course of PR, these are often overlooked as an initial treatment option. In multiple studies, acyclovir led to improvement over placebo in erythema during the first 4 weeks of follow-up, scaling during the first 3 weeks, and symptoms during the first 2 weeks.[8] Specifically, it is hypothesized that during the initial stages of the eruption, the viral replicative activity is highest, thus emphasizing the importance and efficacy of an earlier intervention.[3,9] When choosing a dosing regimen, it has been shown that low-dose acyclovir (400 mg 3 times daily for 7 days) was as effective in decreasing rash duration and pruritus as high-dose acyclovir (800 mg 3 times daily for 7 days or 400 mg 5 times daily for 7 days).[8] In fact, when examining complete regression after 7 days, some studies found that the low-dose regimen was superior to the high-dose regimen.[8] In regards to the dosing of valacyclovir, we used a regimen of 1 g 3 times daily for 7 days; however, studies are lacking regarding the use of valacyclovir in PR, and this case series highlights its effectiveness. Because both acyclovir and valacyclovir are well tolerated with minimal medication interactions, these findings highlight the significance of starting antiviral treatment early in the disease course and that these medications may be useful in PR during pregnancy.

Limitations

Limitations of the study include the number of cases in the series. Additionally, because PR is often a

clinical diagnosis, these cases were not biopsy-proven. All patients received concomitant topical steroids, and, in 1 case, doxycycline was prescribed in conjunction with their antivirals, which could confound the results. Lastly, as PR is a self-resolving disease, in some cases, the natural course of the disease may have contributed to the patients' improvement.

CONCLUSIONS

PR is an acute, self-resolving exanthem that often does not necessitate treatment; however, in some cases, it may be very symptomatic and cover a large body surface area, thus necessitating effective and fast-acting treatment options. We presented the cases of 3 patients with PR who were treated with antivirals (valacyclovir and acyclovir) that all resolved in 2 to 3 weeks when watchful management led to worsening symptoms. Larger studies are warranted to further elucidate antiviral efficacy and optimal timing of use, early versus late in the course of the disease, as well as the effect on pregnancy outcomes in patients with PR. The findings of this study suggest that the use of antivirals could be a cost-effective first-line treatment option for patients with severe or recalcitrant PR as well as an option for those with early signs and symptoms to shorten the course of the disease.

Conflicts of interest

None disclosed.

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