

Case Series

Topical therapy of various dermatoses with Impoyz™ (clobetasol propionate) cream 0.025%

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ABSTRACT

The most widely prescribed drugs for the treatment of a variety of dermatoses are Topical corticosteroids (TC). These medications are approved for the treatment of inflammatory and pruritic manifestations of dermatologic disorders due to their powerful symptom-relieving impact. Clobetasol propionate (CP) is the most popular (TC) used to relieve itching, redness, and oedema caused by a variety of skin disorders. Anti-inflammatory, anti-pruritic, and vasoconstrictive characteristics are all present in it. CP works by binding to cytoplasmic glucocorticoid receptors and activating glucocorticoid receptor-mediated gene expression, resulting in the production of anti-inflammatory proteins while suppressing the production of inflammatory mediators. The formulation is free from known contact allergens, such as propylene glycol, short-chain alcohols, and sorbitol-based emulsifiers, and has demonstrated hypoallergenic effects. The efficacy, safety, and clinical experience of utilizing CP 0.025% cream for the treatment of various dermatologic disorders are discussed in this case series.

Keywords: Clobetasol propionate 0.025%, Plaque psoriasis, Psoriasis, Topical corticosteroids

INTRODUCTION

Topical corticosteroids (TCs) have substantially aided dermatologists' capacity to treat a variety of dermatologic disorders efficiently. Because of the large variety of formulations and high performance of these treatments, they can be employed to treat a wide range of patients, disease stages, and anatomic sites.¹ Psoriasis, restricted

regions of vitiligo, eczema, atopic dermatitis, phimosis, acute radiation dermatitis, lichen planus, lichen simplex chronicus, discoid lupus erythematosus, and lichen sclerosis are among the conditions for which they have been approved by the US FDA. They are also good for conditions with hyperproliferation, as well as immunological and inflammatory qualities.² Clobetasol propionate (CP) is the strongest topical steroid available.

It inhibits cytokine production and has anti-inflammatory, immunosuppressive, and antimitotic effects, altering the growth, differentiation, and function of diverse cells.³ Propylene glycol, short-chain alcohols (e.g. ethanol), and sorbitan sesquioleate, a sorbitol-based emulsifier that is a common allergen in many TC formulations, are all absent from the 0.025% cream formulation of CP.⁴ CP 0.025% is an effective and safe agent due to its high active ingredient penetration and minimal systemic absorption.⁵

The efficacy, safety, and clinical experience of employing CP 0.025% to treat diverse dermatoses are discussed in this case series.

CASE SERIES

Case 1

Impoysz™ (clobetasol propionate) cream 0.025% is efficacious in psoriasis patients

A 53-years-old male presented with hardening/thickening of the skin over both the soles of the feet. He had no significant medical, personal or family history. No occupational risk was reported. No abnormality was detected in vitals and systemic findings, and psychological or social sequelae were absent. The lesions were of size 4×4 cm on the left foot and 3×10 cm on the right foot. The center of the lesions was dry and scaly and accompanied by inflammation. The skin was tender, itchy, warm and scaly with a papular rash (Figure 1a). About 2.1% of the body surface area was covered with lesions. The patient was diagnosed with psoriasis and was prescribed Impoysz™ (CP) cream 0.025% to be applied twice a day. A moisturizing cream was suggested to be applied. The patient was also advised to take cetirizine orally twice a day. The patient was additionally prescribed anti-fungal medications. The patient was also given hygiene instructions and was advised to properly clean the sole of the feet after wash.

On 14th day follow-up visit, there was a good improvement in scaling and plaque elevation. The flares or relapses had decreased, and there was a very good improvement in erythema and itch. (Figure 1b). Overall, there was a good improvement following the topical application of Impoysz™ (CP) cream 0.025%.

Expert opinion

Impoysz™ (CP) cream 0.025% is safe and can be used in the long term for the management of psoriasis. It has good safety with no significant complications. It can be considered as a second-line treatment for managing patients with psoriasis, considering its difficulty in using it as a topical treatment.

Overall, Impoysz™ (CP) Cream 0.025% has good penetration and few side effects, such as skin thinning or atrophy. It shows better results and is very effective.



Figure 1: (a) Pre-treatment image of the lesions on the right foot; (b) post-treatment image of the lesions on the right foot; (c) pre-treatment image of the lesions on the left foot; and (d) post-treatment image of the lesions on the left foot.

Case 2

Efficacy of Impoysz™ 0.025% cream in psoriasis lesion localized on foot: a case report

A 15-years old female presented with an erythematous, itchy, scaly patch on both foot. She had no other medical and personal history or any significant occupational risk factors. However, she had a family history of urticaria /asthma. Vitals and systemic findings were normal and psychological or social sequelae were absent. A lesion of around 4×4 inches was located on the left foot. The lesion was accompanied by inflammation. The appearance was dry, scaly and oozy. The skin had a papular and crusty rash and was tender, warm, itchy and scaly (Figure 2a and 2b). The patient was diagnosed with plaque psoriasis.

Topical Impoysz™ (CP) cream 0.025% was prescribed to be applied to the affected skin area at night for 15 days. A moisturizing cream was also suggested to be applied. The patient was suggested to use antifungal medications and was further advised to avoid dust. At the follow-up on 15th day, erythema and plaque elevation had reduced substantially.

Post-treatment, there was a significant improvement in scaling. The plaque elevation and erythema had reduced. The itching had almost disappeared, providing relief to the patient. A reduction in flares or relapses was seen (Figure 2c and 2d). Overall, the disease severity had reduced after the treatment.

Expert opinion

In this case, the application of Impoysz™ (CP) cream 0.025% resulted in a notable reduction in scaling, erythema and disease severity. Impoysz™ (CP) cream

0.025% can be considered as a first-line treatment for managing patients with erythema, considering its efficacy and safety profile. It has no steroidal side effects. It shows better results and is very effective.



Figure 2: (a) Pre-treatment image of the lesion located on the left foot; (b) post-treatment image of the lesion showing improvement; (c) pre-treatment image of the lesion located on the ankle of the right foot; and (d) post-treatment image of the lesion showing improvement.

Case 3

Efficacy of Impoyz™ (clobetasol propionate) cream 0.025% in topical therapy: a case study report

A 40-years old male presented with reddish, scaly, itchy lesions on the trunk of both upper and lower extremities for the past 4 months. He had no medical or personal history. He also had no family history of a similar dermatological condition.

There were no occupational risk factors. His physical and systemic examinations revealed a pulse of 80 beats/min with a blood pressure of 120/80 mmHg and a respiratory rate of 16 cycles/min. The patient had no psychological or social sequelae.

The lesions were located on the lower limb. The largest lesion was 5×5 cm and the smallest lesion was 2×1 cm in size. Inflammation around the lesion was present. The center of the lesion was scaly. Rash, itching and scaling were observed. It was a papular rash. The body surface area (BSA) was >20.1 (Figure 3a).

The patient was instructed to apply topical Impoyz™ (CP) cream 0.025% to the affected skin area four times daily. At the follow-up visit on 14th day, scaling, erythema and itch

had improved (Figure 3b). Overall, the disease severity had reduced significantly.

Expert opinion

In this case, the application of Impoyz™ (CP) cream 0.025% can be considered as a safe and the overall experience in using it was good.



Figure 3: (a) Pre-treatment image of the dry and scaly skin patches on the trunk; and (b) post-treatment image of the cured patches indicating improvement.

Case 4

Management of psoriasis with Impoyz™ (clobetasol propionate) cream 0.025% topical therapy: a case study report

A 49-years old female presented with red, scaly plaques and itchy lesions all over the body especially over the scalp, trunk, legs and back of the body.

She had hypertension however, no significant family history was reported. The patient neither presented any occupational risk factors nor had any psychological or social sequelae. Her vitals were stable and systemic findings were within normal limits.

Lesions were present over the back, legs and arms and were approximately 15 cm in size. There was inflammation around the lesions, and the center of the lesions was uniform. The skin was warm, itchy, and scaly with maculopapular rash and plaques (Figure 4a). Up to 40%-50% of the BSA was covered with lesions. The patient was diagnosed with plaque psoriasis and was prescribed Impoyz™ (CP) cream 0.025%.

At the follow-up visit on the 14th day, erythema, scaling, and plaque elevation had reduced by 90%-95% and itching had also reduced. (Figure 4b). Overall, a reduction in the severity of the disease was observed with the use of topical therapy. The application of Impoyz™ (CP) cream 0.025% can be considered as a safe as there was no atrophy and the overall experience in using it was very good with no side effects.

Expert opinion

Impoyz™ (CP) cream 0.025% can be used as long-term, first-line topical therapy.

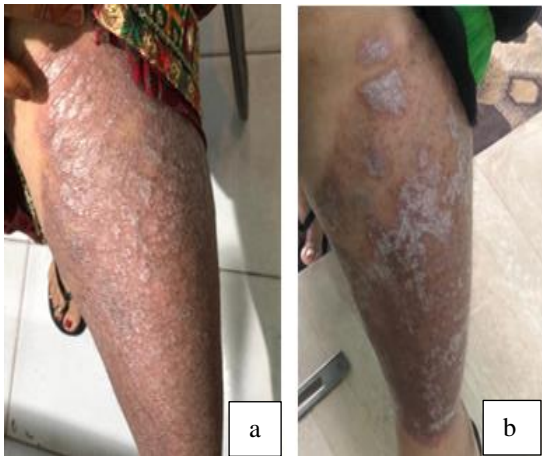


Figure 4: (a) Pre-treatment image of the lesion on the leg; and (b) post-treatment image of the lesion on the leg.

Case 5

Efficacy of Impoyz™ cream 0.025% in psoriasis lesion localized on the mastoid region behind the ear: a case report

A 40-years old female presented with a discoid lupus erythematosus patch over the mastoid region. She had no other comorbidity or any significant family history.

There was no association of any occupational risk factors. The vitals and systemic findings were within normal limits, and the patient had no psychological or social sequelae. The lesion of around 5×5 cm was located on the mastoid region.

The lesion was accompanied by inflammation. The appearance of the center of the region was erythematous. Itching and scaling were also noted (Figure 5a). The patient had a papular rash.

Topical Impoyz™ (CP) cream 0.025% was prescribed to be applied to the affected skin area for 4 weeks. The patient was advised to avoid direct exposure to sunlight. At the follow-up visit on 14th day, erythema and inflammation had reduced substantially. The itching had almost disappeared, providing relief to the patient (Figure 5b). Overall, the disease severity had reduced after the treatment.

Expert opinion

In this case, the application of Impoyz™ (CP) cream 0.025% resulted in a notable reduction in disease severity and complete itch control.

Impoyz™ (CP) cream 0.025% can be considered as a first-line treatment for managing patients with psoriasis, considering its efficacy and safety profile.



Figure 5: (a) Pre-treatment image of the lesion located on the mastoid region; and (b) post-treatment image of the lesion showing improvement.

Case 6

Safety and efficacy of Impoyz™ (clobetasol propionate) cream 0.025% in plaque psoriasis

A 24-years old male presented with a large itchy and scaly patch on the back. He had no other comorbidity, occupational risk, or significant family history. The vitals and systemic findings of the patient were normal, and he had no psychological or social sequelae. The largest lesions were approximately 3×5 cm in size and the smallest 2×2 cm in size.

Inflammation was present surrounding the lesions. Rash, tenderness and warmth were noted. The skin was itchy and scaly with a papular rash.

More than 30% of the body surface area was covered with lesions (Figure 6a). The patient was diagnosed with plaque psoriasis and was prescribed a topical application of Impoyz™ (CP) cream 0.025% to be applied for 4 weeks. The patient was given specific instructions to avoid direct exposure to sunlight.

At a follow-up visit after 2 weeks, erythema, scaling and itch had reduced (Figure 6b).

No plaque elevation or flares/ relapses were seen. Overall, Impoyz™ (CP) cream 0.025% was very safe to use. With a low concentration, it was very efficacious.

Expert opinion

Impoyz™ (CP) cream 0.025% was very safe and very good.

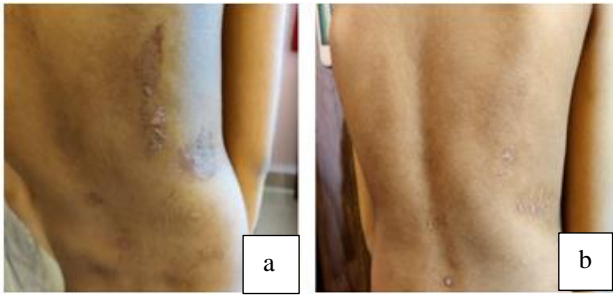


Figure 6: (a) Pre-treatment image of the lesions on the back; and (b) post-treatment image of the lesions on the back.

Case 7

Efficacy of Impoyz™ 0.025% cream 0.025% in vitiligo: a case report

A 10-years old female presented with hypopigmented patches over the face, eyes and neck. She had no other comorbidity or any significant family history. There was no association of any occupational risk factors. The vitals and systemic findings were within normal limits, and the patient had no psychological or social sequelae. There was no presence of any inflammation. The appearance of the center of the region was clear. There were no symptoms of rash, tenderness, warmth, scaling or itching. The patient was diagnosed with vitiligo (Figure 7a). Topical Impoyz™ (CP) cream 0.025% was prescribed to be applied to the affected skin area for 3 months. The patient was advised to avoid direct exposure to sunlight. At the follow-up visit on 14th day, there was a reduction in hypoplastic patches (Figure 7b). There was no side effect seen. Impoyz™ (CP) cream 0.025% was very safe for use in children. It can be used as the first line of treatment in childhood vitiligo.

Expert opinion

In this case, the application of Impoyz™ (CP) cream 0.025% resulted in an excellent reduction of hypoplastic patches.



Figure 7: (a) Pre-treatment image of the lesion located on the face; and (b) post-treatment image of the lesions showing improvement.

Case 8

Treatment of erythematous patch with Impoyz™ (clobetasol propionate) cream 0.025%: a case study report

A 35-years old male presented with itching on the right leg for the past 1.5 years. The patient also complained of the same before 1 year. He had no other comorbidity, occupational risk, or significant family history. The vitals and systemic findings of the patient were normal, and he had no psychological or social sequelae.

The patients mother also presented the same history in the family. The complaint increased during winters. The lesions were approximately 6-7 cm in size and were present on the right leg. There was no presence of inflammation surrounding the lesions. The center of the lesions was hypertrophic.

On skin examination, rash, tenderness or warmth were not present. However, there was presence of scaling and itching. The skin had a crusty rash. The patient was diagnosed with plaque psoriasis (Figures 8a). The patient was prescribed Impoyz™ cream 0.025% for 15 days. The patient was additionally advised to use a moisturizer frequently.

At a follow-up visit after 2 weeks, there was no history of erythema, scaling, plaque elevation, itching, or facial redness. There was a reduction in flares or relapses (Figures 8b). Overall, a moderate decrease was observed in disease severity and an improvement in the treatment was seen with Impoyz™ (CP) cream 0.025%. It can also be indicated as the first line of treatment to decrease the systemic side effects of CP 0.05%.

Expert opinion

Impoyz™ (CP) cream 0.025% is safe to use. Compare to clobetasole 0.05%, the results of Impoyz™ (CP) cream are better.



Figure 8: (a) Pre-treatment image of the lesions on the leg; (b) post-treatment image of the lesions on the leg.

Case 9

Impoyz™ (clobetasol propionate) cream 0.025% is efficacious in psoriasis patients

A 20-years old male presented with itching and burning of skin for the past 20 days. The lesion had a plaque of varying sizes. He had no significant medical history or family history. No occupational risk factor was reported. No abnormality was detected in vitals and systemic findings, and psychological or social sequelae were absent. The lesion was 4×2 inches in size and was present on the leg. The center of the lesions was scaly and accompanied by inflammation. The skin was tender, warm, itchy, and scaly with a papular rash. The patient was diagnosed with plaque psoriasis (Figure 9a). The patient was prescribed Impoyz™ (CP) cream 0.025% to be applied twice a day. The patient was additionally prescribed tablet lyzal to be used for 10 days.

At the follow-up visit on 14th day, there was a significant decrease in scaling, plaque elevation, erythema and itching. (Figure 9b). Overall, the severity of the disease had reduced following the topical application of Impoyz™ (CP) cream 0.025%.

Expert opinion

Impoyz™ (CP) cream 0.025% can be used as the first line of treatment. It is effective and safe to use with no local or systemic side effects. Overall, Impoyz™ (CP) cream 0.025% is good.



Figure 9: (a) Pre-treatment image of the lesions; and (b) post-treatment image of the lesions.

DISCUSSION

Psoriasis is a widespread chronic inflammatory skin disease that manifests itself in a variety of clinical phenotypes and is caused by a combination of genetic, environmental, and immunological factors. Plaque-psoriasis is the most prevalent type of psoriasis, affecting 85–90% of people and characterised by oval or irregularly

shaped, red, highly delineated, elevated plaques coated in silvery scales.⁶

Cobetasol propionate 0.025 percent cream is a class I TC topical product used twice daily to treat moderate-to-severe plaque psoriasis in individuals aged 18 and up.

The addition of pharmaceutical-grade Diethylene glycol monoethyl ether (DEGEE) to CP 0.025 percent has significantly boosted its potency. DEGEE allows for penetration adjustment by boosting the active ingredient's penetration and/or restricting the dissolved active ingredient's systemic absorption. Two pivotal randomized controlled trials and a maximal use safety study have demonstrated efficacy, skin tolerability, and safety of CP 0.025% cream.⁴

According to the findings of a phase IIa trial conducted by Srinivas et al. in Indian patients with moderate-to-severe psoriasis, CP 0.025 percent cream could be a more effective treatment for psoriasis than 0.05 percent cream, because the former showed comparable efficacy while having a better systemic safety profile. On day 28, the 0.025 percent formulations had a lower proportion of patients with an abnormal adrenocorticotrophic hormone stimulation test (cortisol levels 18 g/dL): 5 (20.7%) and 13 (17.2%) vs. 0.05 percent cream (30.0%) (p=0.320). In addition, when compared to 0.05 percent cream, the efficacy endpoint measured by the Psoriasis global assessment (PGA) score was greater with 0.025 percent formulations: 5 (38.9%) and 13 (36.8%) compared with 5 (30.8%).

CONCLUSION

Several new compounds and formulations for the treatment of various skin disorders are now available on the market, all of which have a better risk/benefit ratio. Clobetasol propionate 0.025 percent cream reduces clinical signs and symptoms of moderate-to-severe psoriasis with potent efficacy and safety. Clinical trials of CP 0.025% cream revealed that the formulation is as effective as CP 0.05%. In the therapeutic setting, physicians consider CP 0.025% to be the first-line topical therapy for various kinds of psoriasis.

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