

# Treatment of Psoriasis with Ciclosporin: A Case Report of an excellent response in a Nigerian Patient

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## ABSTRACT

Psoriasis is a complex skin disease of multifactorial origin with its attendant negative impact on the quality of life of affected patients. Management of this skin disorder is also a challenge especially in sub-Saharan Africa with problems of non-availability of appropriate useful medications as well as their prohibitive cost where available.

Ciclosporin had been approved for use in moderate to severe plaque psoriasis by the FDA in 1997 though its use in Nigeria has been quite limited. We report a case of a 43 year old man with a 5 year history of psoriasis that poorly responded to other medications but had significant resolution of skin lesions within 7 weeks of treatment with ciclosporin.

**Key words:** Psoriasis, skin disease, medications.

## INTRODUCTION

Psoriasis is an immune mediated chronic skin condition that leads to a complex cascade of inflammatory events involving keratinocytes, dendritic cells, lymphocytes and endothelial cells with the consequent appearance of thickened plaques on the skin [1].

Various treatment options are used for the management of psoriasis and these include topical preparations like steroidal creams and vitamin D analogues such as calcipotriol for mild to moderate psoriasis. Phototherapy using narrow band UVB or PUVA has also been in use at times in combination with other medications. Oral medications like biologics such as etanercept, infliximab and immunosuppressants like methotrexate and ciclosporin are usually prescribed for moderate to severe psoriasis.

The choice of medications for treatment of psoriasis in Nigeria has been largely limited by the high cost as well as non-availability of most treatment options. This case report highlights the remarkable clinical improvement observed in a patient with psoriasis when treated with ciclosporin.

## CASE PRESENTATION

Mr D.T is a 43 year old man who was seen at the Dermatology Clinic with a history of psoriasis of 5 years duration. The diagnosis had been confirmed by histology at the time of diagnosis in a teaching hospital

in Nigeria. He had numerous psoriatic plaques on his upper and lower limbs with few lesions on the trunk. No nail involvement. He is not a previously diagnosed hypertensive or diabetic.

He had used various medications which includes topical steroids like bethamethasone cream and other topicals like calcipotriol without much improvement. He had never used any systemic or oral medications for the rash and had become worried, discouraged and had stopped his medication since the skin lesions were getting worse.

He had no nail involvement and his blood pressure and blood glucose were within normal limits. Other investigations such as electrocardiogram, liver function tests, electrolyte, urea and creatinine were all normal. He is not a previously diagnosed hypertensive or diabetic. His weight was 75kg.

He was subsequently commenced on ciclosporin at 50mg twice daily. The drug was well tolerated and laboratory parameters remained normal.

By the 7<sup>th</sup> week of treatment he had shown remarkable resolution of virtually all the lesions on his body and he was well motivated to continue his medications. The patient only gave permission for lower limb pictures (Figures 1 and 2).

He is being expected for a follow up review shortly.

## DISCUSSION

Psoriasis is a complex disease which negatively impacts



**Figure 1:** lower limbs of patient before commencement of Ciclosporin



**Figure 2:** Lower Limbs of the same patient after 7 weeks of Ciclosporin

on the quality of life of individuals with the disease [2]. A study had documented that 20% of patients with psoriasis in that review had contemplated suicide [3]. This is due to the fact that the disease could be disfiguring as well as difficult to treat even in developed world where drugs are readily available [3].

The challenges often encountered in the management of psoriasis in the Nigerian and Sub Saharan region include, difficulty in accessing drugs, high cost of treatment modalities as well as problems of patient compliance and follow up. It is therefore pertinent that medications which are found to be of proven efficacy and eventual cost effectiveness be promoted for the management of psoriasis.

Ciclosporin has been well studied and is known to be effective as a treatment for psoriasis especially in moderate to severe chronic plaque psoriasis [4, 5, 6].

The use of ciclosporin for treatment of psoriasis in Nigeria appears to be limited and there are few or no documented studies which have give information on the use of this drug in the Nigerian setting.

The patient discussed in this report had used various medications especially the expensive topical preparations without much improvement since he noticed the skin lesions 5 years ago. The resolution of his skin lesions within 7 weeks of treatment with ciclosporin gave him remarkable satisfaction without complaints suggestive of any adverse effects. Documented side effects such as hypertension,

hyperuricaemia and hypertrichosis among others should be looked out for before and during treatment. However, none of these was reported in this patient. These side effects are comparable with the side effect profile of other oral medications like the biologics as well as methothrexate which is also used in management of psoriasis.

Various studies suggest that the initial effective dose of ciclosporin with the range being 2.5-5mg/kg/day given in two divided doses [4]. This patient was however commenced on a lower dose by choice. Important and basic investigations that ensure good renal and liver profile tests are mandatory before the drug is commenced.

This case report shows that ciclosporin is very effective and safe in the treatment of psoriasis in our environment and should be one of the options to consider in cases of chronic plaque psoriasis that are not responding to conventional drugs that we currently use in Nigeria.

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