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Exfoliative Dermatitis as Adverse Drug Reaction to multiple antileprosy drugs in a patient of Multibacillary Leprosy.
Study FromA Tertiary care Centre: RIMS, Ranchi

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Abstract
A male patient of age 40 years , who was on anti- leprosy treatment for 2 months presented with exfoliative dermatitis. On withdrawal of drugs, symptoms of dermatitis subsided but on reintroduction of individual drugs from MDT, symptoms reappeared with both rifampicin and Dapsone. He had no past history of similar episodes.

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I. Introduction

Leprosy is a chronic disease caused by M. leprae , which manifests with cutaneous and neural affections. MDT is used for the treatment of leprosy patients; Drugs of conventional MDT being Rifampicin, Clofazimine and Dapsone[(1)]. Exfoliative dermatitis is not a frequently reported adverse effect of either of MDT drugs & that too occurring to more than one drug simultaneously.

II. Case Report

A 40 year old male patient from a rural area, farmer by occupation reported to our OPD with complains of generalized redness , scaling and severe itching for last 15 – 20 days. He was diagnosed as a case of erythroderma. [Fig.1] On further history taking he told us that he was taking Multidrug therapy for leprosy and his problems appeared after taking the drug for $1^1/_2$ months. He did not have any similar episodes in the past. There were no signs and symptoms of any of the common primary dermatoses causing erythroderma. Further, he had no history of any more drug intake except for MDT - MB. The diagnosis of Hansen's disease was confirmed by thorough clinical examination and Z - N staining for AFB. MDT was stopped and supportive treatment was given for symptomatic improvement of erythroderma. After his symptoms subsided , we started reintroducing the MDT drugs individually to check for any adverse reaction, starting with Rifampicin. Within 24 hours of taking 300 **mg of rifampicin**, he redeveloped the scaling and erythema with severe itching. It was immediately stopped and Inj. Dexona i.v. BD had to be given for short course. After he recovered fully well, **50 mg Dapsone** was given as a test dose and the same events reoccurred within 24 hours. Both Dapsone and Rifampicin were now blacklisted for him and stopped. On taking Clofazimine he did not report any adverse effects. Now the treatment of Hansen's disease being our primary concern we started with 2nd line drugs for leprosy. On giving **Ofloxacin 400 mg** , he again developed severe itching and generalized exfoliation; this time more severe than previous episodes with some lesions suggestive of Toxic Epidermal Necrolysis(TEN)[Fig.2]. His symptoms were refractory to symptomatic treatment for a prolonged period even after stopping the drugs. We had to add **Methotrexate 20 mg/week , Deflazacort starting from 24 mg tapering every 15 days and**

Gabapentin 300 mg BD to alleviate the intractable pruritus. After 1 month of taking these drugs his condition improved & stabilized [Fig.3].Currently, he is taking Clofazimine 100 mg daily, Clarithromycin 500 mg daily and Minocycline 100 mg daily for treatment of leprosy without any adverse effects.

Fig.1- Patient at the time of admission

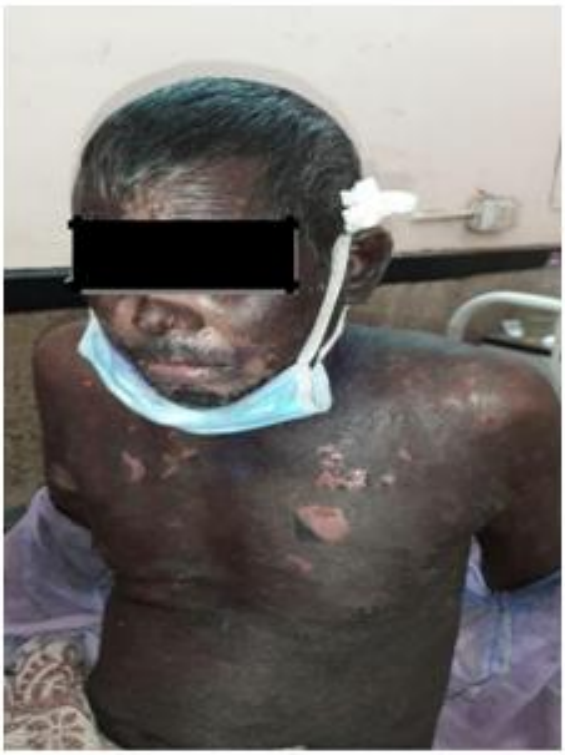

Fig.2 – photograph of patient after taking Ofloxacin 400mg

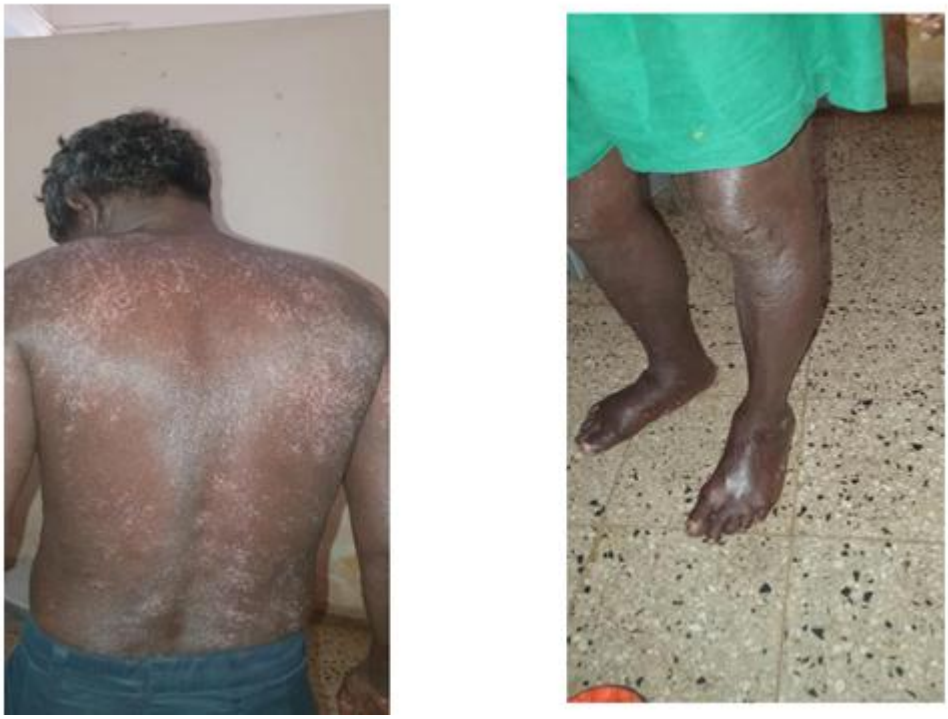

Fig.3- Photograph of the patient after his erythroderma subsided

III. Discussion

World Health Organization implemented the MDT for leprosy in 1981, which was subsequently followed in India in 1982. However, these drugs are not without toxicity.[(2)] Serious adverse drug reactions(ADRs) have been reported with MDT.[(3)] A study by Sukumaram Pradeepnair showed that Dapsone was the commonest drug to cause ADR(60.71%) , while ADR to multiple drugs together (dapsone and rifampicin) were seen in 35.71%.

After review of this case and existing literature we conclude that ADR can rarely present as erythroderma to multiple drugs of MDT together, and can be very recurrent and resistant to treatment.

References

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