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Shamna Haris
Pharm D Intern, Ezhuthachan College of Pharmaceutical Sciences, Trivandrum, Kerala, India

Almaja Lekshmi
Pharm D Intern, Ezhuthachan College of Pharmaceutical Sciences, Trivandrum, Kerala, India

Vijitha Raj VS
Pharm D Intern, Ezhuthachan College of Pharmaceutical Sciences, Trivandrum, Kerala, India

Dr. Bincy Babu
Assistant Professor, Department of Pharmacy Practice, Ezhuthachan College of Pharmaceutical Sciences, Trivandrum, Kerala, India

Correspondence
Shamna Haris
Pharm D Intern, Ezhuthachan College of Pharmaceutical Sciences, Trivandrum, Kerala, India

A case report on Steven Johnson syndrome

Shamna Haris, Almaja Lekshmi, Vijitha Raj VS and Dr. Bincy Babu

Abstract
Background: Steven–Johnson syndrome (SJS) refers to a cytotoxic immune reaction that may occur due to drugs or infections which results in uncommon mucocutaneous disorder leading to the formation of blisters with detachment of skin and mucosa.
Case Presentation: This case report includes the case of a 55 year old female patient who had a concurrent administration of Tab Deflazacort, Tab Hydroxychloroquine along with Ayurvedic medicines to treat rheumatoid arthritis which resulted in the development of Steven Johnson Syndrome followed by admission to the hospital for its management.
Conclusion: Steven Johnson Syndrome was managed appropriately with IV steroids and antihistamines. The symptoms associated with the condition were treated accordingly and subsided.

Keywords: Steven Johnson syndrome, rheumatoid arthritis, ayurvedic treatment

Introduction

Background

Steven–Johnson syndrome (SJS) refers to a cytotoxic immune reaction that may occur due to drugs or infections which results in uncommon mucocutaneous disorder leading to the formation of blisters with detachment of skin and mucosa [1]. Drug allergy is a type of adverse drug reaction that is unpredictable which encompasses a spectrum of immunologically mediated hypersensitivity reactions [2]. Symptoms usually include malaise, fever, sore throat and arthralgia. Lesions are generally erythematous in nature and mostly involves the trunk and spreads distally to include the limbs. It includes fluid bullae which are followed by exfoliation of the skin [3].

Most people tend to choose Ayurvedic medicines, which are considered to be devoid of adverse drug reactions, instead of Allopathic medicines. Adulteration or inherent constituents of Ayurvedic medicines can possibly cause certain adverse events, while Allopathic medicines are known to have adverse events [4].

The risk arises when the patients, who are unaware of the side effects that could happen, administers both of the Ayurvedic and Allopathic medicines concurrently without the knowledge of the healthcare professional.

This case report includes the concurrent administration of Tab Deflazacort, Tab Hydroxychloroquine along with Ayurvedic medicines to treat rheumatoid arthritis.

Case Report

A 55 year old female patient was admitted in the general medicine department with complaints of rash all over body after ingestion of ayurvedic medicine for treatment of Rheumatoid arthritis. Patient showed signs of Steven Johnson Syndrome (SJS) with erythematous rash over face, trunk and limbs and had lip swelling. She had a medical history of Rheumatoid arthritis for 2 to 3 years and had a medication history of T. Deflazacort 6 mg BD and T. Hydroxychloroquine 200mg BD for 6 months. Patient had a flare up of Rheumatoid arthritis and had taken ayurvedic treatment in addition to allopathic treatment, following which rashes appeared all over body along with fever and loose stools. Patient's lab data revealed elevated neutrophils, eosinophils, CRP and reduced lymphocytes.

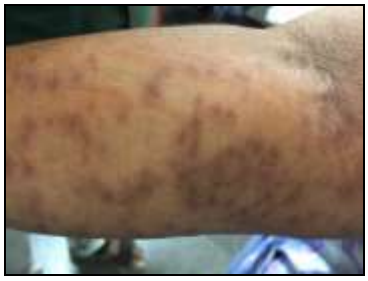

Fig 1: Erythematous rash on hands healing after treatment

Figure 1 shows the image of patient's hand with erythematous rash which had started to heal after treatmen was provided to her with IV steroids and antihistamines. She was managed with T.Acetaminophen 500mg Q6H, Inj Methylprednisolone 40mg IV Q6H, T.Bilastine 20mg OD, Calamine lotion for local application BD and T.Famotidine 40mg OD. She got better and hence was discharged with T.Famotidine 40mg OD, T.Bilastine 20mg OD, Calamine lotion for local application, T.Hydroxychloroquine 200mg OD, T.Deflazacort 6mg BD, Cap Cholecalciferol 60,000 IU and was suggested follow up after 1 week.

Discussion

Steven Johnson Syndrome is a cutaneous adverse reaction, severe in nature and are predominantly caused by drugs. Management usually involves stopping the potentiating drug at the earliest, maintenance of normal body temperature, fluid electrolyte balance, wound debridement and dressing can be done. Maintenance of urine output of 50–80 mL/h with 0.5% NaCl supplemented with 20 mEq of KCl must also be ensured [5]. Here the patient was managed with Acetaminophen for fever and pain reduction, Bilastine was given as an antihistamine, which in addition to calamine lotion helps to reduce the itching and allergic reaction associated with SJS.

Methyl prednisolone was given to reduce the inflammation flare associated with SJS. Systemic steroids have been used for decades as a management option. It can be given orally within 24 to 48 hours of onset of symptoms and can be tapered over the next 7 to 10 days with improved outcome. Dexamethasone is also recommended at a dose of 8 to 16mg per day and can be increased if recovery is not adequate. Methylprednisolone has shown to reduce the levels of pro-inflammatory cytokines such as Interferon gamma, Tumor necrosis factor (TNF-alpha) and Interleukin-6 (IL-6) and reduces the morbidity and mortality rate in patients with SJS [6].

Cyclosporine at a dose of 3mg/kg in 3 divided doses for 7 days and Tacrolimus at a dose of 0.12mg/kg in 2 divided doses are also used for managements of SJS [7]. Use of intravenous N-Acetylcysteine (NAC) at a dose of 300mg/kg/day can lead to improvement of lesions [8]. Famotidine was given to reduce gastric irritation as a H2 receptor antagonist which provides an early effect and potentially blocks H2 receptor thus reducing acid secretion and any internal ulcers or lesions that may have been caused due to drug allergy. The patient showed improvement and hence was discharged.

Conclusion

Steven Johnson Syndrome was managed appropriately with steroids. The symptoms associated with the condition were treated accordingly and subsided. The patient showed sufficient improvement and was satisfied with the treatment and care provided.

Declaration of conflicting interests

The author(s) declare that there is no conflict of interest.

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