HERBAL MEDICINE INDUCED STEVEN JOHNSON SYNDROME: A CASE REPORT

Swathi P., Meghana T., Dr. Gummalla Pitchaiah* and Dr. D. Dachinamoorthi

Department of Pharmacy Practice, QIS College of Pharmacy, Pondur Road, Vengamukkapalem, Ongole, Prakasam District, Andhra Pradesh, India – 523272.

ABSTRACT

Steven Johnson Syndrome (SJS) is a life-threatening illness presenting a severe mucosal erosions with widespread erythematous and cutaneous macules. They are severe forms of exfoliative dermatitis, characterized by extensive epidermal erythema and blistering. Majority of the cases are drug induced affecting oral and peri-oral region. A 30yrs old female patient reported to DVL IPD with the chief complaints of multiple pruritic pustules on the nape of neck and back of both lower limbs, oral ulcers since one month. It was associated with pain, burning type, aggravated on touching and taking food. The past history of the patient revealed that she had chicken pox (2 months back) for which she consumed herbal medicine which was advised by her grandparents. She developed a reaction all over the body after the consumption of herbal drug. There is often a misconception that ‘natural’ means ‘safe’ and many consumers believe that remedies of natural origin carry no risk.

INTRODUCTION

Steven Johnson Syndrome (SJS) is an infrequent but severe form of immune complex mediated hypersensitivity to drugs which typically involves the skin and the mucous membranes.[1] Although SJS is rare with an incidence of 0.05 to 2 persons per 1 million population per year, it has significant impact on the public health in view of its high morbidity and high mortality. Steven Johnson syndrome is a severe hypersensitive reaction that can be precipitated by infections such as herpes simplex virus or mycoplasma, vaccination, systemic diseases, foods and drugs.[2] The drugs that cause SJS commonly are
sulphonamides, antibiotics and anti-epileptics but recently SJS associated with Herbal medicines has been reported.[3]

Toxic epidermal necrolysis (TEN) and Steven Johnson Syndrome (SJS) are severe, episodic, acute mucocutaneous reactions which are almost similar. They are now considered to be differing only in the extent of body surface area involved.[4] Steven Johnson Syndrome may present as a general ailment leading to afebrile, anonymous polymorphic lesions of the skin, a red skin rashes and ulceration on mouth, blisters on the skin and the mucous membranes of mouth, nose, eyes and genitals, peeling of the skin within days after blisters and erosions. Many cases which reported is drug- induced, affecting oral and peri-oral region.[5]

CASE REPORT
A 30yrs old female patient reported to DVL IPD with the chief complaints of multiple pruritic pustules on the nape of neck and back of both lower limbs, oral ulcers since one month. It was associated with pain, burning type, aggravated on touching and taking food.

The past history of the patient revealed that she had chicken pox (2 months back) for which she consumed herbal medicine which was advised by her grandparents. She developed a reaction all over the body. On examination the patient is conscious, coherent. She had pain, multiple pruritic pustules and bullous eruptions on the neck.

Intra oral examinations revealed ulcers on the labile mucosa, oral palate, lips and tongue. The ulcers are haemorrhagic. Based on this the clinical diagnosis was Steven Johnson syndrome. Differential diagnosis was Pemphigus vulgaris. She was treated with Inj.Dexamethasone BD for 22 days, Inj.Ceftriaxone 1gm for 7days, Inj.Celamini iv infusion once in 3 days as a parenteral nutrition for 22 days, soframycin + betamethasone valerate ointment topically for 11 days, silver sulphadiazine ointment topically for 11 days, IV fluids such as ringer lactate and normal saline were prescribed for 11 days, Tab.pantoprazole for 22days, Tab.metronidazole 400mg TID for 11 days. All the lesions appeared to be healed after 22 days. So the patient was self-discharged with the medication Tab. Prednisolone 20mg for 10 days followed by 10mg for 10 days and 5mg for 20 days. Tab. Azithromycin BD for 30 days, Tab.Pantoprazole 40mg for 30 days, tab. Diclofenac for 30 days, tab. B.Complex for 30 days, betamethasone valerate ointment for 30 days.
Again she was admitted into the hospital as the disease progression occurs. Same treatment was continued but the patient died after 10 days due to the lack of medication adherence and severe.

![Figure 1](image1.png) ![Figure 2](image2.png)

**Figure 1** Skin rashes over lips and neck along with extensive blistering lesions with mucosal involvement.

**Figure 2** Skin rashes over hands.

**DISCUSSION**

Steven Johnson syndrome is a type-IV hypersensitivity reaction which typically effects skin and mucous membrane. It is a form of toxic epidermal necrosis with 10-30% of body surface area detachment. Drug induced SJS typically presents with fever and flu like symptoms first. After 2-3 days signs begin in mucous membrane including moth, nose, eyes and genetalia. The skin lesions manifests as macules and the macules later progressed as large blisters with subsequent epidermal detachment.[6]

Herbal medicines usually contain multiple ingredients and it is not possible to identify them all. However, in our case, the product name could not be identified due to absence of labelling. Traditional medicines are now used outside the confines of traditional cultures and far beyond the traditional geographical areas without proper knowledge of their use and the underlying principles. The concomitant use of traditional medicines with other medicines which is now frequent, is quite outside the traditional context and has become a particular safety concern. Adverse events reported in association with herbal products are attributable to problems of quality. Major causes of such events are adulteration of herbal products with undeclared other medicines and potent pharmaceutical substances such as corticosteroids and nonsteroidal anti-inflammatory drugs (NSAIDs). Adverse events may also result from the mistaken use of wrong species of medicinal plants, incorrect dosing, and errors in the use of
herbal medicines both by health care providers and consumers, interactions with other minerals and use of products contaminated with potentially hazardous substances such as toxic metals, pathogenic micro-organisms and agrochemical residues etc.[7]

CONCLUSION
Steven Johnson syndrome is a dermatological disease which results in morbidity and mortality. A complete comprehensive literature revealed that there are some cases reported due to SJS by herbal drugs. Oral ulcers are the initial complaint which most of the patients may ignore. Symptomatic management for the oral ulcers is necessary. Early diagnosis helps the clinician to evade further progression and complications. There is often a misconception that ‘natural’ means ‘safe’ and many consumers believe that remedies of natural origin carry no risk but there is no evidence.

REFERENCES