Stevens-Johnson syndrome and toxic epidermal necrolysis overlap associated with alternative medicine: A case report

Kushagra Sharma1*, Joseph Saji2

1,2Intern, 1,2Dept. of Pharmacy Practice, 1,2Nims Institute of Pharmacy, Rajasthan, India

*Corresponding Author: Kushagra Sharma
Email: kushagra211194@gmail.com

Abstract
Stevens-Johnson Syndrome (SJS) and Toxic Epidermal Necrolysis (TEN) are rare, acute and life-threatening conditions usually associated with mucosal loss and can be caused by various medicines. Even it also may cause by took alternative medications from unregistered medical practitioner (Hakeem). It includes the severe form of mucosal dermatitis, and characterized by extensive epidermal blistering, it leads to epidermal necrosis and loss of the epidermis. They can also cause oral mucosa lesions. A 11 year old female patient admitted with the complain of headache, loose stool, haematuria, rashes with itching followed by mucosa loss throughout the body, including both face and hands, multiple ulcers present in the oral cavity. On laboratory investigation, abnormal values were: - White blood cell (11500/microliter) and SGOT (60 U/L), SGPT (86 U/L) levels are abnormally identified. Patient was treated with Injection Vancomycin 4ml in 60ml in Normal saline q.i.d. (4 times a day) for 10 days. Further changed to tablet Azithromycin 250 mg once daily for next 5 days. Injection Meropenum (8mL+12mL), Injection Lipomadol. Lidocaine and fusidic acid jelly application 3 times daily for lips and skin lesions was prescribed.

Keywords: Stevens - Johnson syndrome, Toxic Epidermal Necrolysis, Erythema dermatitis.

Introduction
Stevens-Johnson syndrome (SJS) and Toxic epidermal necrolysis (TEN) are rare with fluidic blisters1. In 1922, Steven and Johnson defined “A high fever with stomatitis and ophthalmitia” was exemplify as a serious form of erythema. By the 1940’s it was usually called as “Steven Johnson’s syndrome (SJS)”. The range of the perception of erythema multiforme has been broadly recognized subsequently.2 It is a rare disease with an occurrence of 0.05-2/1 million persons per year, with high rate of morbidity and mortality.1 Majority of cases were drug-induced.3-5 They are also large under reported worldwide.

Case report
A 11 years old female patient reported in Department of paediatrics with chief complaints of Extensive Rashes over entire body, Headache, Loose Stool for 4 days and Blood in Urine for 1 day. History of present illness revealed that lesions are erythematos macular in nature started first on chest and then descended, downwards and towards the face. At present lesions are cover entire face, chest, back, abdomen, upper limb and lower limb. They have black crustung which bleeds on removing.

The past medical history revealed that Patient had fever 4 days back, it was acute on onset, progressive in nature, not associated with chills and rigors. Patient took medication from unregistered medical practitioner after which rashes with burning sensation appeared on her chest and in oral cavity.

The lesions are erythematos macular in nature. The upper and lower lip were swollen, and haemorrhagic crust were present with profuse bleeding. Laboratory investigations revealed leucocytes (white blood cells are 11500 microliters, SGOT (60 U/L), SGPT (86 U/L) and raised C-reactive protein 24.0 g/ml. We had prevailed the patient to only the haematological investigation due to the lesion being acute, and the patient was under severe discomfort. Based on medical history, clinical examination, and physical examination our diagnosis was SJS–TEN overlapping.

The patient was treated under an expert guidance of paediatrician with antibiotic Injection Vancomycin 4ml in 60ml in Normal saline q.i.d.(4 times a day) for 10 days. Further changed to tablet Azithromycin 250 mg once daily for next 5 days. Injection Meropenum (8mL+12mL), Injection Lipomadol. Lidocaine and fusidic acid application 3 times daily to heal the lips and skin lesions was prescribed.

Saline gargles thrice a day was prescribed for ulcers in the oral cavity. Application of Ciprofloxacin ointment to treat ophthalmic infection. The patient was reviewed on daily basis. Lesions had healed fairly in the oral cavity and on the skin. Reviewed after 15 days revealed that lesions on all the surfaces are completely recovered approximately in 50 days.

Discussion
SJS and TEN are said to be two different severity of cutaneous drug reactions. Both are rare and predominantly affect the skin and mucous membrane. TEN affecting >30%
of body surface area detachment of the epidermis classified as the sever form of SJS in which <10% of total body surface area is affected, the intermediate 10% to 30% is said to be SJS overlapping TEN syndromes. Case reports suggest the cause of SJS due to many drugs which also includes herbal medication like Ginkgo biloba.

In this case study SJS with overlapping TEN syndromes has been reported due to some traditional unspecified drug prescribed by an unregistered medical practitioner for fever. In India, remote villagers mostly depend upon these kinds of unregistered medical practitioners for the treatment of most of the disease and these kinds of practitioner’s misuses religious myths and faith for earning and prescribe some kinds of unknown medication which they believe to heal most of the diseases.

The patient was a 11 years old female came after the reference from another village hospital. She came with chief complaints of extensive rashes over entire body, Headache, Loose stool for four days and Blood in urine for one day. After her first dose of the unspecified medication she had a burning sensation followed by ulcers which first appear on chest and descent down to leg, thigh, and genital organs and up words towards face, lip, oral cavity and arms and later spread towards entire face, chest, back, abdomen, upper limb and lower limb. The lesions covered more than 10% and less than 30% of the total body surface area.

Our patient reported with lesions those are erythematous macular in nature and her upper and lower lip were swollen with the presence of haemorrhagic crust and profuse bleeding. Thus our patient was physically diagnosed with SJS overlapping TEN syndrome.

SJS was reported to caused by various drugs but it was not yet reported by some traditional medication. As a Paediatric patient our patient was treated under an expert guidance of paediatrician. Overcoming barriers of treatment such as economic burden, patient medication acceptance etc. The treatment was 14 days of hospital stay.

Conclusion
This case report reports that the traditional medicines prescribed by the unregistered medical practitioners can also cause sever hypersensitivity reactions which can be life threatening. Therefore, the patients must be educated not to take medicines without proper prescription or from any unregistered medical practitioners.

Acknowledgement
I take this opportunity to thank my parents, all the faculty members for their help and support to publish this case study.

Conflict of Interest: None.

References
1. Yap Ffb, Wahiduzzaman M, Pubalan M. “Stevens - Johnson Syndrome (SJS) and Toxic Epidermal Necrolysis (TEN) in Sarawak: A four years” Review. Egyptian Dermatol Online J 2008;4(1):1-13.
2. Deore. S. “Drug induced- Stevens - Johnson Syndrome”, Int J Sci Res 2014;2(4):84-7.
3. Schopf E, Stuhlmer A, Rzany B, Victor N, Zentgraf R, Kapp If, “Toxic Epidermal Necrolysis and Stevens-Johnson Syndrome: an epidemiologic study from west Germany”, Arch Dermatol 1991;127:839-42.
4. Kamaliah MD, Zainal D, Mokhtar N, Nazmi N, “Erythema Multiforme, Stevens Johnson Syndrome and Toxic Epidermal Necrolysis in north eastern Malaysia”, Int J Dermatol 1998;37:520-3.
5. Yamane Y, Aihara M, Ikezawa Z, “Analysis of Stevens-Johnson Syndrome and Toxic Epidermal Necrolysis in Japan from 2000-2006”, Allergol Int J 2007;56(4):419- 25.
6. Sabishruthi S, Vedha Pal JS, Kavitha S, Deepak Paul DB, Ponsegaran V, “An illustrative case study on drug induced Steven - Johnson Syndrome by ginko biloba”. J Clin Res 2018;2:105.

How to cite this article: Sharma K, Saji J. Stevens-Johnson syndrome and toxic epidermal necrolysis overlap associated with alternative medicine: A case report. Int J Pharm Chem Anal 2019;6(2):53-4.