

STEVEN JOHNSON SYNDROME: A CASE REPORT

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ABSTRACT

Extremely severe acute hypersensitivity reaction known as Stevens-Johnson syndrome (SJS) results in widespread skin and mucous membrane necrosis. SJS is an illness that can strike people of any age and has no recognized etiology. When prescribing medication to patients, doctors have an obligation to inform them about potential adverse effects. Stevens-Johnson syndrome, a potentially lethal illness mostly affecting the skin and mucosal surfaces but also affecting other essential organs, is one such medication side effect, including tetracycline. The syndrome can be effectively treated with a variety of therapies, however the use of steroids for this purpose is still debatable. Treating the presenting symptoms is the mainstay of care for people with Stevens-Johnson syndrome.

KEYWORDS: Steven Johnson syndrome, tetracycline,
hypersensitivity, side effect.

INTRODUCTION

Steven Johnson Syndrome / Lyell's syndrome/ Erythema multiforme major is a serious but rare skin disorder usually occurring due to a reaction to any medication or infection that causes skin and mucous membrane develop rashes, blister and then peel. Furthermore the top layer of affected skin dies and sheds and begin to heal after several days. It is a medical emergency that requires immediate hospitalization in order to prevent it from worsening.^[1-4]

Females are more susceptible to the disease than males and it usually occurs in children and adults more than 30 years of age.

Stevens-Johnson syndrome (SJS) is an acute hypersensitivity reaction that causes extensive necrosis of the mucous membrane and skin. SJS results from a cytotoxic immune reaction in keratinocytes, which leads to widespread keratinocyte apoptosis.^[5-6]

Here we report a case study of a well oriented man who visited hospital in regards to multiple lesions on his body but came to know that he was suffering from Steven Johnson Syndrome/SJS as a side effect to his previous therapy. This case report addresses the problem of a patient who was suffering from multiple body lesions, along with other symptoms such as infected lips. As it was a moderate case, the diagnosis was made on the basis of his symptoms, physical examination and medical history (Past+present) and later the cause was detected that it occurred due to allergic reactions to certain medications taken by the patient for any other ailment. Due to the allergic reaction to such drugs it was concluded that the patient was suffering from Steven Johnson Syndrome. It is also known as Lyell's Syndrome. In this case study we will come to pinpoint conclusion on how the patient was so immaturely trapped in this rare and dangerous disorder.^[7]

CASE STUDY

Patient Description:- A male patient of 45 years of age was admitted to the hospital with chief complaint of multiple lesions all over the body from last 6 days along with dysphagia, painful speaking and swollen lips.

Case History:- Upon conversation with the patient, it came to our view taht he has a past history of breathlessness/cough (Approx. 2 years) along with history of severe pain in the knees as he dropped from the vehicle. For this he took certain medications which were Ampicillin, aceclofenac+PCM, calcium supplements, carbamide, chlorzoxazone, pantobesid and nortryptilline+pregabalin.

Physical Examination: - Patient was calm, conscious and well-oriented. The vitals were P.R. 110bpm; B.P. 110/70 mm/Hg; Temp. 98.6F. He was also suffering from cyanosis.

Lab investigation – RBS: 94 mg/dl; MCHC: 31.6 g/dl; RDW-SD: 57.4; Hct: 39.6; Hb: 12.7g/dl; RBC: 4.16 mill./mm³ of blood; WBC: 8000; N%:85%; L%: 12 %; M: 2%; Urea: 24mg/dl; Creatinine: 0.8mg/dl; Uric acid: 4.2mg/dl; Globulin: 2.2mg/dl; Albumin: 4 g/dl;

Proteins: 6.2g/dl; ALP; 76 IU/L; T.Bill. 1.4mg/dl; Conj. Bill. 0.2 mg/dl; SGOT: 34 IU/L; SGPT: 36 IU/L. Ultrasound and chest X-ray was done and reports were normal.

TREATMENT

| DRUG | DOSE | FREQUENCY | ROUTE | EXPECTED OUTCOME |
|---------------------------------|---------------|--------------|-----------|--|
| Inj. Hydrocortisone | 100mg | Bis in dine | I/V | Suppressing the progression of hypersensitivity reactions from moderate to severe case |
| Inj. Pheniramine | 1 ampoule | Once a day | I/V | Treat allergic responses |
| Inj. Vancomycin | 150 gm | Once a day | I/V | Treats any underlying bacterial infection |
| Inj. Pantop | 40 mg | Once a day | I/V | Protecting the formation of acid in the body due to medications |
| Mometasone+Luliconazole cream | 10gm + 1% w/w | Bis in dine | Topically | Overcome lips infection |
| Mometasone with dry skin lotion | 10gm | Thrice a day | Topically | Overcome skin infection |
| Potassium permanganate | 0.25 N | Once a day | Topically | Washing bodily infections purely on daily basis |
| Kenacodin | 0.1% w/w | Thrice a day | P/O | Cure buccal cavity infections |

DISCUSSION

This case report addresses the problem of a patient who was suffering from multiple body lesions, along with other symptoms such as infected lips suffering from Steven Johnson Syndrome. The patient was not so illiterate and he visited the clinician at a crucial time which prevented his progression from moderate to severe stage. As it was a moderate case, the diagnosis was made on the basis of his symptoms, physical examination and medical history (Past+present) and later the cause was detected that it occurred due to allergic reactions to certain medications taken by the patient for any other ailment. Due to the allergic reaction to such drugs it was concluded that the patient was suffering from Steven Johnson Syndrome. In this case study we will come to pinpoint conclusion on how the patient was so immaturely trapped in this rare and dangerous disorder. Steven Johnson syndrome is a medical condition in which multiple lesions form on our body covering almost less than 10% of its entire range. It mainly occurs due to reaction to a medication or any infection (mainly viral) or both. In this blisters start forming on our skin, furthermore it spreads leading to peeling/shredding of our skin & eventually the affected skin part dies. All this happens because of our over active immune response to our body which leads to inflammation (severe in nature) followed by involvement of MHC-1, T-helper cells, cytokines, neutrophils, macrophages, CD-8+ T cells and many more of our innate immune system. This condition requires immediate medical

attention to a skin specialist who usually diagnoses it based on the combination of a person's symptoms, medical history (past & present) & his physical examination. Biopsy can be used to confirm the diagnosis. (Anonymous 2) It usually begins with flu-like symptoms followed by a red or purple rash which spreads to form blisters and mainly causes high temperature, fatigue, tiredness, cough, sore throat, etc. Its treatment aims at providing supportive care along with cessation of medication (in case of drug-induced SJS) or taking measures for prevention against infection like as hygiene maintenance, wound care, replacing lost fluids and nutrients, eye care, etc. It also aims at symptomatic maintenance and improvement by referring to general pain relievers, antibiotics and further more class of medicines as per patient's specificity which further prevents from unborn complications.^[8]

Due to its early diagnosis patient was treated successfully with corticosteroids, anti-histamine and antibiotic which prevented him from moving to a complicated stage and affecting his quality of life. All this was caused by reaction to certain medications so the utmost prevention is to seize the usage of particulars by the patient himself and his immediate family members due to its genetic predisposition along with the supportive care.

CONCLUSION

This case illustrates a clinically important and life-threatening adverse effect of certain category of medications example ampicillin, pregabalin and how it can be triggered by acetaminophen that it leads to development of a dangerous and rare disorder on an unfortunate basis. Nowadays due to the high incidence of such hypersensitivity reactions with various modern lifestyle changes various awareness and prevention programmes must be set up which should indulge people that they should visit the clinician immediately after visualising any adverse effect. Public must be educated regarding these small problems on an important basis.^[9]

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