

# CASE REPORT ON PHENYTOIN INDUCED STEVENS-JOHNSON SYNDROME

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**Abstract:** Stevens-Johnson Syndrome (SJS) is a serious systemic allergic reaction with a characteristic rash involving the skin and mucous membranes including the buccal mucosa, conjunctiva, and genital areas. The incidence of SJS is estimated 1-6 cases per million person-years. The disease is included in the category of severe cutaneous adverse reactions (SCAR). A 43 years old male patient who was on phenytoin for seizure disorder since 6 months, presented with erythematous rashes all over the body, conjunctivitis and mouth ulcers which are typical symptoms of SJS.

We hope that his case report helps to create awareness to the health care professionals as it highlights the importance of adopting vigilant approach while prescribing anti-epileptics.

**Keyword:** Stevens-Johnson Syndrome; Phenytoin; Hypersensitivity.

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## 1. INTRODUCTION

SJS is a rare, serious disorder of skin and mucous membrane. It was first described in 1922, as an acute mucocutaneous syndrome in two young boys. It is most often a reaction to a medication or an infection. Approximately 75% of SJS are caused by medications, such as antibacterial sulfa drugs, antiepileptic drugs including phenytoin, carbamazepine, phenobarbital, allopurinol (used to treat gout and kidney), NSAIDs including piroxicam, nevirapine, diclofenac. Depending upon the causes, it might be called as drug induced Stevens-Johnson Syndrome or mycoplasma induced Stevens-Johnson Syndrome. It is characterized by persistent fever, conjunctivitis, body aches, malaise, cough, body rashes.

## 2. CASE REPORT

A 43-years-old male presented with the complaints of maculopapular rashes all over the body since 4 days. It was gradually progressive in nature involving whole body associated with itching, periocular edema, conjunctival redness, mouth ulcers, high grade intermittent fever (2 days) and breathlessness and chest pain since 20 days. He also had myalgia, arthralgia, altered sensorium, abnormal behavior and was an alcoholic since 20 years. He was on Phenytoin 100mg (PO 1-0-2) for seizure disorder since 6 months. On examination his blood pressure was 86/60 mmHg and Pulse rate was 130/min.

On physical examination, the patient showed erythematous rashes all over the body, conjunctivitis and mouth ulcers. The laboratory findings showed that WBC 16,770 cells/mm<sup>3</sup>, lymphocytes 7%, monocytes 27%, ESR 105 mm/hr, GRBS 240 mg/dl, liver function test indicates elevated levels of AST (231 U/L), ALT (109 U/L), ALP (157 U/L), GGT (590 U/L), and urine pus cells was found to be 5-6 cells/HPF.

The subjective evidence, objective evidence and supported by literatures the patient was diagnosed to be suffering from Phenytoin induced Stevens-Johnson syndrome (SJS), oral candidiasis and newly detected Type II Diabetes Mellitus.

Therefore, Phenytoin was withdrawn and replaced with Tab. Levetiracetam 500mg. Symptomatic management was done with intravenous fluids, Inj. Ceftriaxone 1gm B.I.D, Inj. Piperacillin-Tazobactam 4.5 gm T.I.D, Inj Dexamethasone 4mg T.I.D, Inj. Chlorpheniramine 10mg B.I.D (later replaced with Tab. Cetirizine 10mg OD after two days), Inj. H Actrapid

s.c according to s/s, Inj. Pantoprazole 40 mg OD, Inj. Paracetamol 1gm SOS, Neb. Duolin T.I.D, Neb. Budecort B.I.D, Betadine mouth gargle T.I.D, and Candid mouth paint B.I.D.

### **3. DISCUSSION**

SJS is a rare mucocutaneous cell-mediated hypersensitivity reaction which is potentially life threatening and commonly drug-induced. Drugs such as anti-gout medications, Pain relievers, sulfa antibiotics and anticonvulsants are mainly considered. In this case, the patient was presented with all the typical symptoms of SJS. He came with the complaints of maculopapular rashes all over the body. Relevant laboratory data, physical examinations and medical history of intake of phenytoin since 6 months pointed out that the person was suffering from Phenytoin induced Stevens-Johnsons Syndrome, oral candidiasis and newly detected Type II Diabetes Mellitus. Previous researches have also shown the evidence that phenytoin can induce SJS.

### **4. CONCLUSION**

SJS is rare but lethal manifestation of Type IV Hypersensitivity Reaction. It is reported considering its academic value as a potentially life threatening condition with certain drugs. The case highlights the importance of adopting vigilant approach while prescribing anti-epileptics. Regular monitoring of ADRs, educating physicians and patients helps in early diagnosis and prevent the development of serious consequences of this idiosyncratic reaction.

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