

STEVEN JOHNSON SYNDROME: THREE CASES REPORTED IN IRAQ***JAAFER M. KURMANJI, *MANAL M. YOUNUS, *MAYTHAM H. A. AL-AMIRY**

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ABSTRACT

Steven Johnson Syndrome is a serious complicated immunological adverse drug reaction with high rate morbidity and mortality. Most frequent medication that may cause this reaction is Allopurinol, antibiotics and Non-Steroidal anti-inflammatory drugs. In this report three cases with SJS are presented upon using different medications from different regions in Iraq which testifies a lack of reporting such adverse drug reactions to the competent authorities.

Keywords: Steven Johnson Syndrome, Adverse Drug Reaction, Iraqi Pharmacovigilance.

BACKGROUND

Adverse Drug Reaction (ADR) is a noxious, unintended effect of the medications and it's considered as the fourth cause of death in the United State¹. Stevens Johnson Syndrome (SJS) is rare, serious hypersensitivity disorders which is usually react severely to an infection or medication. This disease affects the skin and mucous membranes at the skin, mouth, eyes, and genitals²⁻³. It is severe and highly weakening adverse drug reactions⁴. This case series try to represent three cases with this disease from different region in Iraq.

Case 1

H.S a female 40 years old from Al-musul city, she had no drug allergy. After she took Ampicillin cap 500 mg four times a day for two days; she developed mild skin rash. The patient stops using Ampicillin but the rash with increase and evolved all the body in which she could not see by her eyes that made her visit a hospital. The doctor in the hospital diagnosed the case as a Steven Johnson Syndrome and started a treatment including hydrocortisone vial, fluids, Fusidin topical cream, Lidocaine ointment on face and chest and Chloramphenicol eye drop. The patient condition deteriorated that cause her death after three days of admission.

Case 2

F.A a three and a half years male child his weight 20 Kg, suffered from respiratory tract infection. He received a maximum dose of Cefotaxime vial as 1g IM injection three times per day. The patient developed fever, sore throat, fatigue and mucous membrane lesion in mouth and lips, the case considered as a life threatening condition. He admitted to the hospital and starts a medication regimen on Nystatin drop oral, Azithromycin suspension 200mg/day, Paracetamol syrup besides fluids, by the time we received this case he was still under monitoring. (figure 1)



Fig. 1: Case 2

Case 3

J.K a 65 years old female admitted to the hospital complaining from lower abdominal pain, frequent bowel movement for two days. She is not drug allergic and hypertensive with type 2 diabetes, she is under medications control. Her blood pressure at the time of admission was 190/100 mm hg and body temperature was 37.2, the doctor added Amlodipin 5mg/day tab with Furosemide amp 20mg/twice daily to manage the blood pressure, Ciprofloxacin IV fluid 200mg/twice daily for bowel infection in addition to Diclofenac amp 75mg twice daily. The patient developed skin rash and blustering, lips swelling and mouth ulceration after six hours of injection both Furosemide and Diclofenac, the doctor diagnosed the case as a Steven Johnson Syndrome. (Figure 2)



Fig. 2: Case 3

DISCUSSION

Steven Johnson Syndrome characterized by facial swelling, tongue swelling, skin pain, red or purple skin rash that spreads, blisters on your skin and mucous membranes, especially in mouth, nose and eyes in addition sloughing of the skin⁵. In 1993 SJS classified separately from erythema multiforme and added to toxic epidermal

necrolysis based on the pattern of the lesion and the extent of epidermal detachment⁶. The incidence rate reach to six cases per million annually; mortality rate of untreated cases about 15%, treatment of such cases may reduce the mortality rate until 5%⁷. First description of SJS was in 1922 by pediatricians A.M. Stevens and F.C. Johnson after diagnosing a child with severe ocular and oral involvement to a drug reaction⁸. Stevens-Johnson syndrome usually occurs among children and young adults and usually develop following medication use and some infections include viral upper respiratory infections, mycoplasma pneumonia, Herpes simplex infection⁹.

The most frequent medications cause this adverse reaction; are antibiotics like Sulfonamide and beta-lactams antibiotics, analgesics like Diclofenac, Alopurinol and anti-convulsant drugs like antiepileptics¹⁰. It is generally start as a fever, flu like symptoms, sore throat, which forbid early diagnosis of this disease, then rash and ulceration arise subsequently⁵. Treatment for Stevens-Johnson syndrome is as depending on the symptoms of each case but the preliminaries of the management is withdrawing any suspected medications and early diagnosis¹¹. Therapeutic management of (SJS) patients must be progressed in particular intensive care units in similar technique of the burned patients including warmed environment, correction of electrolyte disturbances by using fluids, increasing caloric intake, administration of topical antibiotics, and prevention of super-infection and sepsis. Some cases needed to use specific medications like intravenous immunoglobulins, cyclosporin, and systemic corticosteroid in cases with life-threatening systemic impairment¹². First degree patient's relatives should be aware to avoid any medications or chemicals that may be responsible¹³. Recovery from Stevens-Johnson syndrome may require two to three months, according to the number of organs affected and the severity of disease⁹. These cases were reported to the Iraqi Pharmacovigilance Center during 2011 which is newly founded center in the Iraqi ministry of health and suffer from lack of ADR reporting as other developing countries¹⁴; for that they are consider as a brick in building our data base specially that it discusses one of the important adverse reaction of different medication and different region around Iraq.

CONCLUSION

Stevens-Johnson syndrome is a serious adverse drug reaction with high morbidity and mortality rates with unexpected adverse reaction of some medications. These cases are considered as the initial reports of Steven Johnson Syndrome in Iraq. Although, there is a lack of active spontaneous reporting to the Iraqi pharmacovigilance center but the reporting of such cases are considered as a good example and essential step toward improving patient safety in such developing systems of PV. Physicians should be aware about the incidence of the Stevens-Johnson syndrome as a potential complication of treatment and the dissemination of such

cases to HCP is also important to increase awareness towards the importance of reporting of such cases.

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