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Case Report

Levofloxacin and Ibuprofen Leading to Steven Johnson Syndrome: A Dermatological Emergency

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Introduction:

Stevens-Johnson syndrome is a rare, serious disorder of your skin and mucous membranes. It's usually a reaction to a medication or an infection. Often, it begins with flu-like symptoms, followed by a painful red or purplish rash that spreads and blisters. Then the top layer of the affected skin dies, sheds and then heals.Stevens-Johnson syndrome is a medical emergency that usually requires hospitalization.[1] Treatment focuses on eliminating the underlying cause, controlling symptoms and minimizing complications as skin regrows. Recovery after Stevens-Johnson syndrome can take weeks to months, depending on the severity of condition. If it was caused by a medication, you'll need to permanently avoid that drug and others closely related to it.[2,3]

Case Report

A 43 year old patient, came to emergency department in Benazir Bhutto hospital. Patient was conscious with a GCS of 15 by 15 and normal vitals.He complained of rash and itching all over body .On history taking,patient told that he went to TB hospital in Rawalpindi for TB workup as advised by some doctor in Lahore.TB workup came negative and doctor prescribed levofloxacin ,ibuprofen and an expectorant for LRTI.He took 1st dose of medications 3 days back and after taking the dose,he started to develop ulcers in mouth and lips and genital areas with multiple blisters and bullae on legs and arms (Figure 1).Patient discontinued the medication .He has no known comorbids.He had no other significant medical or social history. On examination,patient was afebrile with a BP of 120 by 80,pulse 80 per min respiratory rate of 16 per min.There were multiple blisters and bullae on legs and arms with desquamating lesions on lips.There were ulcers in mouth and genital areas.Rest of systemic examination was unremarkable.

Patient was retained in ER and IV line was maintained and was given injection Avil and Solcortif 250mg,injection calamox ,injection ceftriaxone and injection zantac.Subsequently, patient was shifted to medical unit II of BBH for diagnosis and further management.In ward ,blood tests were taken and were found within normal limits. Dermatology consultation was taken and patient diagnosed of Steven Johnson Syndrome on basis of history and skin lesions and skin biopsy which showed less than 10 percent involvement of skin. Treatment given to patient was tablet deltacortil (5mg) 4+4; Kenalog Orabase(triamcinolone acetonide) BD on affected areas; Daktarin oral gel (Miconazole) BD on affected areas; Paraffin Guazes BD on affected areas; Inj calamox (Coamoxiclav) 1.2 g XTDS; Hydrex Emollient .Addition of unnecessary medications to treatment plan was prohibited.Patient remained on these medications for a week in ward and his condition improved.He was advised not to take these medications in future and discharged after a week since his admission.He was followed up in OPD and his condition further improved.

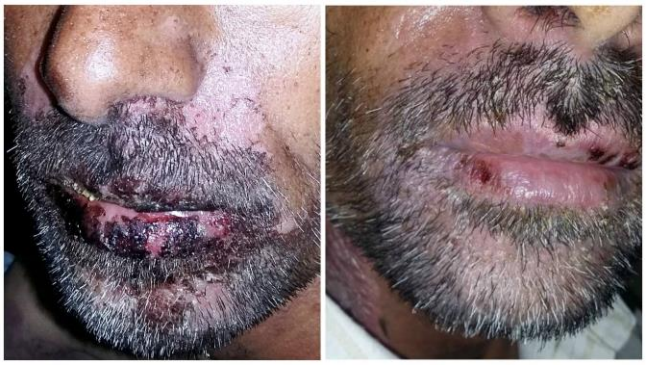

Figure 1: Steven Johnson Syndrome – Ulcers on lips and oral cavity

Discussion

Steven Johnson Syndrome (SJS) is a rare condition, with a reported incidence of around 2.6 to 6.1 cases per million people per year. The condition is more common in adults than in children.[5] Women are affected more often than men.SJS usually begins with fever, sore throat, and fatigue, which is commonly misdiagnosed and therefore treated with antibiotics. Ulcers and other lesions begin to appear in the mucous membranes, almost always in the mouth and lips, but also in the genital and anal regions. Those in the

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mouth are usually extremely painful and reduce the patient's ability to eat or drink occurring at a two to one ratio.[6]

SJS is thought to arise from a disorder of the immune system.The immune reaction can be triggered by drugs or infections. Genetic factors are associated with a predisposition to SJS.[7]SJS may be caused by adverse effects of the drugs vancomycin, allopurinol, valproate, levofloxacin, diclofenac, etravirine, isotretinoin, fluconazole,valdecoxib, sitagliptin, oseltamivir, penicillins, barbiturates, sulfonamides, phenytoin, azithromycin, oxcarbazepine, zonisamide, modafinil, lamotrigine, nevirapine, pyrimethamine, ibuprofen, ethosuximide, carbamazepine, bupropion, telaprevir, and nystatin.[8]

The second most common cause of SJS is infection, particularly in children. This includes upper respiratory infections, otitis media, pharyngitis, and Epstein-Barr virus, Mycoplasma pneumoniae and Cytomegalovirus infection.[9] Diagnosis is based on less than 10 percent involvement of skin. If it is more than 30 percent it is toxic epidermal necrolysis.SJS constitutes a dermatologic emergency.Treatment consists of supportive care and corticosteroids.[10]

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