## **Case Report**

DOI: 10.18203/2320-6012.ijrms20150182

# Chlordiazepoxide induced Stevens-Johnson syndrome in acute pancreatitis

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**Received:** 31 March 2015 **Accepted:** 07 May 2015

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### **ABSTRACT**

Stevens-Johnson Syndrome (SJS) is an acute hypersensitive reaction and a life-threatening condition affecting both skin and mucous membranes. We report a case with SJS likely induced by Chlordiazepoxide. The patient undergoing treatment for acute pancreatits is prescribed with Chlordiazepoxide after administering the patient reported mild pyexia with lesions all over the body with redness. Mild peeling of the skin due to rupture of the lesions and pigmentation on the skin was observed for 3 days. Based on these finding he was diagnosed with Chlordiazepoxide induced Stevens-Johnson syndrome. The patient was administered systemic steroid therapy and treated symptomatically. Here we describe a case of Chlordiazepoxide induced SJS in acute pancreatitis patient.

Keywords: Stevens-Johnson syndrome, Chlordiazepoxide, Acute pancreatitis

## INTRODUCTION

Chlordiazepoxide 50 years ago, it broke the history of Psychopharmacology, it enters into the group of benzodiazepines, it is the excellent drug used in the treatment of anxiety disorders and it is also used in the management of alcohol withdrawal syndrome. 1 It affects neurotransmitters in the brain that may become unbalanced and cause anxiety.<sup>2</sup> Adverse drug reactions produced by Chlordiazepoxide are more selective such as physical and psychological dependence; withdrawal syndrome; impair psychomotor performance, aggression (in predisposed individuals, especially in combination with alcohol); sedation; blood dyscrasias, jaundice, hepatic dysfunction and rarely causes hypoplastic or hemolytic anemia. Stevens-Johnson Syndrome (SJS) is an IgE mediated hypersensitivity disorder which typically involves the mucocutaneous membranes.<sup>3</sup> SJS is a rare disorder where potentially severe morbidity and mortality

occurs very commonly in geriatrics due to the use of more drugs.  $^{4}$ 

## **CASE REPORT**

A 39-year-old male was presented to our emergency department due to fever with fluid filled lesions all over the body and redness and burning sensation of both the eyes. Peeling of the skin due to rupture of the fluid filled lesions and pigmentation on the skin since 3 days. The patient had a history of acute pancreatitis and is prescribed with T. chlordiazepoxide 25 mg twice daily. After administering chlordiazepoxide he developed maculopapular rashes occurred all over the body with fever. The patient was then shifted to the department of Dermatology on physical examination showed an extensive erythematous macules and papules with blisters and detach edepidermis on his neck, trunk, back, feet, and lower limbs (Figure 1). Skin detachment was found to be approximately 5% of body surface area with scattered

skin rashes and oral ulcers were also observed. Laboratory examinations, including a complete blood picture, and immunological inspection were found to be normal. The patient was diagnosed as chlordiazepoxide-induced SJS. After being treated with steroids and antihistamine for 2 weeks, the patient greatly improved and he was discharged.



Figure 1: Maculopapular rash on the trunk and back.

#### **DISCUSSION**

Stevens-Johnson syndrome was first described in 1922, as an acute mucocutaneous syndrome characterized by severe purulent conjunctivitis, Stomatitis with extensive mucosal necrosis, and purpuric macules.<sup>5</sup> The incidence of SJS associated with drug use was 1.8 per one million. The diagnosis of SJS is based on clinical features such as an acute onset of rapidly expanding erythematous macules, necrosis and detachment of the epidermis along with erythema.6 The patients usually develop a hypersensitivity reaction between hours and 2 weeks after starting the medicine.<sup>7</sup> Our patient had erythematous rashes on the skin and mucosal involvement 2 days after starting chlordiazepoxide treatment. During these 2 days, he took no other medicine except chlordiazepoxide. Although many factors have been proposed as risk factors of SJS, including drug induced, infections, malignant disorders and graft rejection, most of them were due to the adverse effect of drugs. The most common drugs are NSAIDs, antipsychotics, antibiotics, allopurinol, andanticonvulsants.8 Several agents have been tried for the management of this disorder. Systemic corticosteroids are used in the early stage of SJS. Therapeutic management is by parenteral administration of glucocorticoids, N-acetyl cysteine, pentoxifylline, and anti-TNF-alpha antibodies, chlorhexidine oral rinses help for oral ulcers and white-soft paraffin application on lips relieves the pain. Though none has conclusively been shown to be beneficial. The causality assessment of SJS with chlordiazepoxide using Naranjo's causality assessment scale showed the reaction may be probable and WHO Uppsala Monitoring Centre (UMC) causality

assessment scale also indicated a probable association with chlordizepoxide.<sup>9</sup>

#### CONCLUSIONS

Stevens-Johnson syndrome is a potential drug induced fatal disorder. Prescribers must therefore be more cautions before prescribing the drugs to their patients. Patients should be educated regarding the adverse effects, especially in case of old aged.

Funding: No funding sources Conflict of interest: None declared Ethical approval: Not required

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DOI: 10.18203/2320-6012.ijrms20150182 **Cite this article as:** Ramineni HB, Boppudi B, Silviya Grace B, Yerramaneni R, Suryadevara V. Chlordiazepoxide induced Stevens-Johnson syndrome in acute pancreatitis. Int J Res Med Sci 2015;3:1527-8.