Thiacetazone Induced Stevens - Johnson Syndrome

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Stevens - Johnson Syndrome described by Stevens, A. M. and Johnson, F. C. (1922) is the bullous erosive form of Erythema Multiforme with a wide etiopathogenesis. The cause is attributed to certain infection or allergic reaction to an infection or foreign agent or a hypersensitivity reaction. This may be the result of viral¹, bacterial, fungal or parasitic infections or drugs, endocrine agents, collagen diseases, neoplasia, renal disease², contact reactions and deep X-ray therapy.³ Direct immunofluorescence studies have shown immune complex etiology with deposition of IgM around superficial dermal vessels. Drugs are claimed to be responsible for about 60% of cases⁴, of which the commonest are sulphonamides, penicillins, tetracyclines, phenylbutazone, antipyretics, analgesics, barbiturates, phenolphthalein, thiacetazone etc. Stevens - Johnson Syndrome due to the later drug escapes many literatures and are not too frequent.

The disease is common in second and third decades with a prodrome of 1 to 14 days. Onset is sudden involving the skin and mucous membranes. The constitutional symptoms

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include fever, malaise, upper respiratory tract infection, chest pain, vomiting, myalgia and arthralgia followed by explosive bullous lesions on mucous membranes and skin. The lips display a characteristic haemorrhagic crusts as a result of bullae rupturing mucous surfaces. Oral mucosa, lips and conjunctivae are most frequently and rather severely involved⁷ to the extent of pharynx, larynx, oesophagus and respiratory tree. Genitalia and anal orifice may remain spared. With severe involvement, bilateral purulent conjunctivitis, cornea ulceration, anterior uveitis and even blindness may follow.⁷ Stomach, spleen, liver, kidneys and other viscera may also be involved. The disease may lead to complications and prove fatal if timely uncontrolled.

Case Report

A 28 years old female patient (Fig.)

diagnosed as a case of pulmonary tuberculosis was on tablet Isoniazid (300 mg.) with Thiacetazone (150 mg.) (RD Zone) by T. B. Control Project. There was no history of intake of any other drugs. On the 19th day of RD Zone therapy, she became febrile with vesiculobullous eruptions all over body and was brought to the Department of Dermatology, Bheri Zone Hospital, Nepalganj and was admitted. She had multiple erythematous, macular as well as vesico-bullous lesions all over body with ulcerations on her mouth, lips, conjunctivae, nostrils and ears. The lips showed characteristic haemorrhagic crusts. Her breasts, genitalia and anal orifice were also involved. The lesions were followed with moderate itching. Patient had dysphagia, dysuria

with burning in micturition and dyspnoea. While opening the mouth, she felt severe pain associated with hoarseness of voice and cough due to involvement of pharynx, larynx, oesophagus and lungs, the later being packed with coarse crepitations. The patient was semiconscious, severely dehydrated and anemic with hypotension due to involvement of extensive skin surface leading to fluid and electrolyte imbalance.

Laboratory examination showed plenty of pus cells and RBCs in urine and stool. Erythrocyte sedimentation rate, blood urea and serum bilirubin were elevated with electrolyte imbalance, leukocytosis and anemia. X-ray chest was diagnostic of active Pulmonary Tuberculosis. VDRL, blood sugar and others were to normal limits.

RD Zone therapy was immediately withdrawn. The patient was put on rehydration therapy with a high dose non-fluorinated corticosteroids, antibiotics, antihistaminics and symptomatic measures along with good nursing care and local hygiene. The patient improved dramatically over a period of three weeks. Steroid was tapered off gradually. She was put on antitubercular treatment (Rifampicin, INH, Ethambutol) for active Pulmonary Kochs. Patient tolerated well to this combination without any adverse effect. It did prove thiacezone alone to be the cause of Stevens - Johnson Syndrome in this patient. Provocation test with a low dose thiacezone further justified the diagnosis.

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