ORIGINAL ARTICLE

EXPERIENCE OF TREATMENT OF PATIENTS OF STEVENS-JOHNSON SYNDROME (TOXIC EPIDERMAL NECROLYSIS) IN BURN UNIT

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SUMMARY

In patients of Stevens-Johnson syndrome (SJS) there is extensive loss of epidermis resulting in same pathological features as that of burn injury.

Two patients were referred to Burn unit of Civil Hospital Karachi. They were treated on lines of burn patients, i.e. I/V fluids, antibiotics, blood transfusions, high protein diet, wound coverage with antibacterial creams other then containing sulphonamides and subsequently with skin autografts.

Out of two patients, one expired after five days of stay in the unit. Other patient was almost healed after 53 days of stay in the ward, but he has to undergo amputation of left upper limb above elbow joint and five sessions of graftings. The early referral of SJS patients to specialized burn units will definitely result in better prognosis for these patients.

KEY TERMS: BURNS, SYNDROME, STEVENS-JOHNSON SYNDROME.

INTRODUCTION

Steven Johnson syndrome is severe allergic reaction to certain drugs like sulphonamides, penicillin, erythrocin, allupronal, phenytoin and phenobarbital. The patient usually presents with a maculopapular rash, generalized bullae formation and subsequent necrolysis of the epidermis. The mucosal surface are also involved.

Patient exhibit loss of fluids and electrolytes from their surfaces of wounds and are more prone to infection and septicema. Since there is generalized loss of epidermis all over the body clinical condition is mostly similar to superficial second degree burn.

PATIENTS & METHODOLOGY

In the year 1995 two cases of Stevens-Johnson syndrome were admitted in the Burn unit of Civil Hospital Karachi.
CASE NO. 1: This was a case of a lady of 50 years. She had a severe rash after taking three tablets, each containing 500 mg sulfadoxine and 25 mg pyrimethamine (Tab. Fansidar - Roche). She came to Medical emergency of Civil Hospital Karachi after three days of rash. She remained in the medical ward for 14 days where she was kept on tablet Prednisolone 30 mg 8 hourly.

Her wounds were dressed with Nitofuran cream (Furacin). She was referred to Burns unit with deep infected wounds (Fig. 1) involving 68% of the total body surface area. She was toxic looking with 9 gm% hemoglobin and total leucocyte count of $4 \times 10^9$/l.

In Burns unit patient’s wound were dressed with cream containing polymyxin B sulfate 10,000 units & bacitracin zinc 500 units (Polyfax). Septicemia was tried to overcome by starting Inj. Cefotaxime (Clafron) 1 gm eight hourly and Inj. Gentamycin 80 mg eight hourly after sending blood sample and wound swab for culture and sensitivity. Fresh blood was given on alternate days. Daily fluid regime given was consist of Inj. Ringer’s lactate 2000cc and Inj. normal saline 1000cc in 24 hours.

Patient develop diarhoea on the 5th day. She got restless, tachypnoic, and expired.

CASE NO. 2: This was a young man of 25 years of age. Develop rash after taking two tablets of sulphamethoxole plus trimethoprim (Septran). Initially treated at Khairpur, was referred to Hyderabad. He remained in some medical ward of Liaquat Medical College, Jamshora for about a week.

When he came to burn unit he was having tab. Prednisolone 20mg eight hourly with following lesions:
- Gangrene of left upper limb upto above elbow (Fig. 2)
- Sloughing of glans penis.
- Deep wounds involving 25% of the total body surface area on the abdomen and both thighs.
Management involves the emergency amputation of left upper limb below shoulder joint. Blood, plasma and antibiotics were given. Electrolytes and fluids were managed accordingly. Raw area were skin grafted and five sessions were done during 53 days stay of patient.

RESULTS

Case No.1: Succumbed to her wounds and died because of sepsis.
Case No.2: stayed with us for 53 days and came out alive with amputation of left upper limb and loss of glans penis with abnormal urethral opening on ventral surface of penis.

DISCUSSION

Definition of Stevens-Johnson syndrome (SJS) remains elusive. Some workers take it as synonymous to Erythema multiform and some consider it as a variant of Toxic epidermal necrolytic (TEN) syndrome in children. Other workers consider the three variants to be different spectrums of severity of same pathological process.

Because the cutaneous injury is similar to a partial skin thickness burn, it is appropriate to admit patients with SJS to a burn unit where meticulous wound care can be provided. The sooner the patients is referred to a specialized care, the better would be outcome.

In our series Case No.1 came to us after 14 days of stay in medical unit and Case No.2 after 1 week of stay in medical care. Diagnosis of the lesions were made by the physicians treating them.

The availability of burn wound nursing and materials for large wound dressings makes management simple as compared to management in standard medical wards.

Both of our patients when came to us were taking steroids. Our preference is not to give steroids or if already begun, to withdraw them by tapering off the dose. This is because it is shown in burn patients that steroids treatment increases the risk of infections.

Local management of the wounds of patients with SJS also differs slightly. Usually we use silver sulfadiazine (SSD) 1% (Dermazine & Flamzine) in our burn patients, but as our both SJS patients were sensitive to sulfa drugs we avoided SSD and used Polymyxin B sulfate & Bactrcine (Polyfax).

Out come of Case No.1 is not unusual as septicemia is a dreaded complication of an open wound including burns but the out come of Case No.2 is somewhat unusual in the sence that extensive gangrene is not a feature of SJS. This most probably seems to be due to sheer negligence in initial stages or inadequate knowledge in wound management that leads to development of this complication and ultimately amputation.

In general we feel that all patients of SJS and related extensive skin loss should be treated at specialized burn care centre. Of course the diagnosis and initial management should be the responsibility of Physicians and Dermatologist.

REFERENCES:


