

A CASE STUDY OF STAPHYLOCOCCAL SCALDED SKIN SYNDROME THROUGH AN INTEGRATED APPROACH**Dr. Nishant S. Wakode*¹, Dr. T. Y. Swami², Dr. A. B. Kale³, Dr. A. P. Rana⁴ and Dr. Ashish Singh⁵**¹PG Scholar, Department of Kaumarbhritya, Government Ayurved College, Osmanabad Maharashtra, India.²Associate Professor, Department of Kaumarbhritya, Government Ayurved College, Osmanabad Maharashtra, India.³Head of Department, Department of Kaumarbhritya, Government Ayurved College, Osmanabad Maharashtra, India.⁴Assistant Professor, Department of Kaumarbhritya, Government Ayurved College, Osmanabad Maharashtra, India.⁵PG Scholar, Department of Kaumarbhritya, Government Ayurved College, Osmanabad Maharashtra, India.***Corresponding Author: Dr. Nishant S. Wakode**

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ABSTRACT

Staphylococcal scalded skin syndrome which mainly affect children. We present a case of 1-month old infant with blisters all over the body and fever. The diagnosis of Staphylococcal scalded skin syndrome was reached on clinically. The child responded to treatment which include antibiotics, analgesic, hydration, local applications with intravenous fluid along with *Ayurvedic* management of local application of *Haridra yukta Shatdhauta Ghrita*, *Haridra* has anti-inflammatory effect as well as anti-oxidant. *Septilin* drop and Syrup *Bonnison* were used which thought to act on multiple system and help to enhance immunity. The child was discharged after 10 days with almost complete resolution of skin lesion and hygiene measure are imperative for the effective management of Staphylococcal scalded skin syndrome.

KEYWORDS: Staphylococcal scalded skin syndrome, Ayurveda, *Shatdhauta ghrita*, Superficial blisters.**INTRODUCTION**

Staphylococcal scalded skin syndrome is predominantly Caused by phage group 2 staph. – Strains 71, Strains 55 at site of infection. Foci of infection include nasopharynx, and less commonly umbilicus, urinary tract, superficial abrasion, conjunctiva and blood. SSSS which occurs predominantly in infant and children younger than 5 yr of age. The clinical manifestations of staphylococcal scalded skin syndrome are mediated by hamatogenous spread, in the absence of specific antitoxin antibody of staphylococcal epidermolytic or exfoliative toxins A or B. The toxins have reproduced the disease in the both animal model and human volunteers. Decrease renal clearance of the toxins may account for the fact that the disease is most common in infant and young children, as well as lack of protection from antitoxins antibodies. clinical manifestation in which onset of rash may be preceded by malaise, fever, irritability and exquisite tenderness of the skin. The brightly erythematous skin may rapidly acquire a wrinkle appearance, and in severe cases, sterile, flaccid blisters and erosion develop diffusely.^[1] We present a case of 1-month old infant with SSSS, predominantly the role of early diagnosis, treatment and discussing the latest development in the field.

CASE REPORT

A 1-month old infant presented in balrog outpatient department with erythematous blisters all over the body. The child was irritable and afebrile at that time. The baby was born by normal vaginal delivery at Osmanabad civil hospital. The mother was primigravida and had no any personal drug consumption history except iron and folic acid. No any history in the family belong to this disease. Immunization were complete for his age. On admission the infant had peeling of skin over face, watery discharge in both eyes, erythematous rashes over body which is ruptured with minimal pressure and desquamation of skin. Nikolsky sign was positive.^[2] Hence the infant grew more irritable, refused to feed and developed tachycardia. A diagnosis of SSSS was reached based on history and clinical features.

INVESTIGATION

WBC- 9.2 10³/uL
RBC- 3.30 10⁶ /uL
HGB- 11.0 g / dL
HCT- 31.8 %
MCV- 96.4 fL
MCH- 33.3 pg
MCHC- 34.6 g/dL
PLT- 295 10³/UI

DIAGNOSIS

Clinically and Nikolsky sign



On Admission On Discharge

MATERIALS AND METHOD

An intravenous catheter was introduced for the infusion of IV fluids. Parental cefotaxim 100 mg/kg in two divided doses, gentamycin 6 mg/kg in two divided doses. Paracetamol was used for countering the fever and pain. The skin lesions were covered with sterile *Jatyadi ghrita* dressing.^[3] *Shatdhaut ghrita* was applied separately twice a day on the blisters over body.^[4] In complete blood count WBC count raised. Prior initiating antibiotic therapy. Meanwhile the infant responding well to the all treatment as the desquamation had stopped after 10 days therapy, the erythroderma completely resolved and skin lesions were healing. The patient was subsequently discharged.

RESULT AND DISCUSSION

Staphylococcus scalded skin syndrome include blistering of skin on superficial layers due to the exfoliate toxins released from *S. aureus*. It is major skin infection, body gets peeled off and looks like burned skin by hot liquid. Neonate and less than 5years children are generally at high risk of SSSS due to reduced immunity against bacterial exotoxins and imperfect renal clearance. We can compare SSSS with *Paridagdha Chavi* in Ayurveda which is explained in *Asthang Samghraha Uttartantra* 2nd chapter.^[5] *Paridagdha Chavi* disease can be compared with burn injuries in child Immediate medication with parental- gram positive anti staph. Antibiotics, penicillin group & MRSA can be used. For hydration maintain IV Fluid used and used local application. In this case, we had used both medication- Ayurveda as well as Allopathic medicine due to severe condition of baby.

CONCLUSION

SSSS is a critical syndrome in which acute exfoliation of the skin occurs followed by erythematous cellulitis and main causative agent is exfoliative toxins of *S. aureus*. As per *Ayurveda*, we can assume *Paridagdha Chavi* disease and treat them as a burns injury. The baby was 1-month old and he had multi-system affected at a time of admission. So we were treating symptomatically-

parental IV Fluid antibiotic, oral medication and local application under all aseptic condition. At the time of admission, we had done basic investigation like WBC was raise, so antibiotic used. Baby was unable to take breastfeed and for hydration maintain we used RL, ½ DNS and NS parentally.

Most important, local application at site- for it we used *Haridra yukta Shatdhauta Ghrita* twice a day under all aseptic condition. *Haridra* has anti-inflammatory action as well as anti-oxidant. Then after 5 days we used *Jatyadi Ghrita* for local application by 10 days. And eye infection Tobramycin eye ointment used. So we had treated by integrate approach the SSSS in infant.

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