Staphylococcal scalded skin syndrome (SSSS) is an exfoliative dermatitis produced by the toxins of some strains of staphylococci, predominantly phage Group 2, strains 71 and 55. It has been reported mostly in children under 5 years of age with few cases only reported in very preterm infants. The disease can be life threatening in very low birth weight preterm babies. We are reporting one such case to emphasize the importance for clinicians to not only recognize the clinical manifestations of SSSS but also the need to closely monitor infants, especially VLBW infants with SSSS for bacterial sepsis and other complications.

**Key words:** Staphylococcal scalded skin syndrome, Preterm very low birth weight, Exfoliate dermatitis

Staphylococci are found in nasopharynx and less commonly on umbilicus, urinary tract, superficial abrasions, conjunctiva, and blood and spread hematoogenously. The differential diagnosis of SSSS includes drug-induced toxic epidermal necrolysis, epidermolysis bullosa, bullous mastocytosis, herpetiform lesions, and neonatal pemphigus. It has been reported mostly in children >5 years of age with only few cases reported in very preterm infants. The disease can be life threatening in very low birth weight preterm babies. In these cases, the disease might cause significant complications and can be life threatening. We are reporting such a case.

**CASE REPORT**

We present a case of a baby, who is a late preterm, 35 weeks gestation, 1.045 kg, small for gestational age, first of twin (discordant), girl baby born by lower segment cesarean section (Indication twin pregnancy and intrauterine growth restriction) to a 27-year-old G2P1L1 mother. The second twin weighed 1.93 kg. After the birth of the baby, she cried immediately and no active resuscitation was required. The baby also had anemia, for which leukodepleted packed red blood cell transfusion was given. She was on routine low birth weight (LBW) baby care and breast milk feed.

On postnatal day 23, the baby developed watery nasal discharge and she was treated with saline nebulization and nasal drops. On postnatal day 25, she developed peeling of skin, initially in the perioral area, where the base of the lesion was erythematous. Subsequently, she developed peeling of skin over forearm, hand, abdomen, and buttocks (Fig. 1a and b). Her sepsis screen was negative and blood culture and sensitivity did not show any growth. However, the nasal and skin swab cultures showed heavy growth of coagulase positive *Staphylococcus aureus* sensitive to Linezolid and were treated with IV Linezolid for 10 days. Initially, the baby was very sick and required IV fluids along with other supportive measures but gradually improved with IV antibiotics and her skin lesions improved with topical applications of Vaseline. Further, course in the hospital was uneventful and the baby was discharged with...
subsequent follow-up, along with the other twin. There was no
evidence of staphylococcal infection in both the parents and there
nasal swab cultures were sterile. There was no recent outbreak of
staphylococcal infection in the NICU.

DISCUSSION

Exfoliative skin diseases are relatively rare in newborn. When
caused by coagulase-positive \textit{S. aureus}, scalded skin diseases such
as SSSS and bullous impetigo may develop [2]. Predominantly, it
affects children <5 years of age and is very rare in LBW preterm
infants. Characteristically, SSSS consists of diffuse erosions
with epidermal separation in the submucosal layer through the
granular layer. The typical features of SSSS are involvement
of periorificial face, deep epithelialization of friction zones, and
absence of mucosal involvement. It mimics toxic epidermal
necrolysis (Lyell’s syndrome). However, in toxic epidermal
necrolysis (Lyell’s syndrome), there is a severe involvement
of visible mucosa and also the respiratory, gastrointestinal, and
urinary tract mucosa [4,5].

In infants and young children, potentially fatal complications
include pneumonia, septic arthritis, hypothermia, dehydration, and
secondary infections. With appropriate management, however,
mortality due to SSSS in children remains <5%. Therefore, early
diagnosis and appropriate treatment can prevent the mortality
associated with these complications.

Diagnosis of SSSS is mainly based on clinical features. Tzanck preparation from a freshly denuded area may reveal many
acantholytic cells without inflammatory cells. Culture specimen
should be collected from the nose, throat, or pyogenic focus on
the skin for isolation of staphylococci.

\textit{S. aureus} infection is usually hospital acquired in premature
infants and as with any other infection, prevention is a high
priority. Outbreaks of SSSS have been reported in NICUs due
to handling of the babies by infected or asymptomatic carriers
of staphylococci. Personal barrier technique is the most effective
ways to prevent transmission of infection. Proper hand washing,
minimal handling, appropriate cleaning of equipment between
uses, avoiding central catheterization, isolation of the infected
infant, and placement of exposed neonates into a cohort are the
methods to prevent spread of infection [5,6].

CONCLUSION

SSSS in VLBW preterm babies is very rare but fatal, and hence,
an early prompt diagnosis and treatment with parenterally
administered beta-lactamase-resistant penicillins, are important
to prevent life-threatening complications of this syndrome.

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