Petechial Hemorrhage: A clinical diagnosis of neonatal Thrombocytopenia and sepsis

Deepak Kumar Sharma*, Srinivas Murki, Tejo Pratap Fernandez Hospital, Hyderabad, India

ABSTRACT

A preterm female baby with birth weight of 1.5kg was referred to our hospital on day 6 for difficulty in breathing. Baby was admitted at birth for respiratory distress and feed intolerance to other hospital and in view of clinical deterioration baby was referred. Baby had thrombocytopenia with platelets counts of 11000/ mm³ and high CRP titer. Baby had petechial haemorrhagic spots all over the body with hepatosplenomegaly and sclerema (Figure 1). Baby further platelets counts were 3000, 43000, 67000 and then normal. Baby was managed with antibiotics and platelets transfusion. Gradually baby counts improved and petechial spots disappeared.

Neonatal Sepsis is a common complication in the neonatal intensive care unit. It is most common in the smallest and most premature infants in whom the clinical presentation can be subtle and nonspecific. Thrombocytopenia is the common manifestation of neonatal sepsis in sick babies (1). The manifestation can be seen in newborn as petechial spots over the body with predominance over chest and abdomen (2). Thrombocytopenia is seen in 18% to 35% of NICU patients, and in 73% of extremely low birth weight (ELBW) infants (3). Bacterial, fungal and viral infection causes thrombocytopenia. Infection causes damage to vascular endothelium which increases the destruction of platelets and there removal by reticuloendothelial system (4).

Keywords: Neonatal sepsis, Neonatal Thrombocytopenia, Petechial Hemorrhage

Case

A preterm female baby with birth weight of 1.5kg was referred to our hospital on day 6 for difficulty in breathing. Baby was admitted at birth for respiratory distress and feed intolerance to other hospital and in view of clinical deterioration baby was referred. Baby had thrombocytopenia with platelets counts of 11000/ mm³ and high CRP titer. Baby had petechial haemorrhagic spots all over the body with hepatosplenomegaly and sclerema (Figure 1). Baby further platelets counts were 3000, 43000, 67000 and then normal. Baby was managed with antibiotics and platelets transfusion. Gradually baby counts improved and petechial spots disappeared.
Discussion

Neonatal Sepsis is a common complication in the neonatal intensive care unit. It is most common in the smallest and most premature infants in whom the clinical presentation can be subtle and nonspecific. Thrombocytopenia is the common manifestation of neonatal sepsis in sick babies (1). The manifestation can be seen in newborn as petechial spots over the body with predominance over chest and abdomen (2). Thrombocytopenia is seen in 18% to 35% of NICU patients, and in 73% of extremely low birth weight (ELBW) infants (3). Bacterial, fungal and viral infection causes thrombocytopenia. Infection causes damage to vascular endothelium which increases the destruction of platelets and there removal by reticuloendothelial system (4).

Lesson to clinicians

1. In neonates thrombocytopenia is very common in sepsis which can present as petechial spots. Treating physicians must notice these clinical presentation of sepsis and treat them.

2. When baby have sclerema and thrombocytopenia, clinical suspicion of sepsis must be given importance and baby started on antibiotics without waiting for laboratory results.

Acknowledgement

The authors would like to thank from all coworkers that help us to this Research.

References