## **LETTER TO EDITOR**

## **Neonatal Transport is a Challenge in Our Country**

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A significant number of neonates require emergent transfer to a tertiary care center, often because of medical, surgical, or rapidly emerging postpartum problems. These are termed "outborn" neonates, because they have been born somewhere besides the facility to which they've been transferred. Timely & proper availability of transport facility improves the outcome of these newborns. Various adverse situations are observed like lack of organized transport system, Scarce and inaccessible facilities, ill equipped health facilities, families with poor resources. No provider accompanies baby, to offer any possible care en route underdeveloped communication systems and poor or non-existent road links make the implementation of referrals complicated. Many a baby thus transported are cold, blue and hypoglycemic and 75% of such transferred babies have serious clinical implications [1-3]. The preferred option is to transfer mother and fetus in utero. Unfortunately, preterm delivery, perinatal illness, and congenital malformations cannot always be anticipated, resulting in a continuing need for the ex utero transfer of babies after delivery [4].

Transporting neonates still remains one of the greatest challenges in developing countries like us. All high risk newborn babies should be delivered in a centre having NICU facilities to avoid the hazard of transport after delivery. Inter and intra hospital transport of neonates is an integral component of the neonatal care process. During transportation a stable microen-

vironment is preferred that will ensure an ideal mix of oxygen, temperature, and humidity to prevent cold stress. Transporting sick neonates is not an easy task. Care providers should, therefore, be ready, competent and confident to handle this responsibility. Every newborn should be stabilized before transportation. Mother should accompany the baby as far as possible. A doctor & a nurse should also accompany the baby if possible. I think without care provider Neonatal Transporter should be prohibited. The parent should be explained the condition, the prognosis and the reasons for referral of the baby. They should also be advised as to where to go and whom to contact, The referral facility should be informed beforehand, if possible. The referring doctor should send a note covering the antenatal, intranatal & neonatal details along with the baby.

Available models for pretransport stabilization are STABLE (Sugar, Temperature, Airway, Blood pressure, Laboratory work up and Emotional support) [5], SAFER (Sugar, Arterial circulatory support, Family support, Environment and Respiratory support) [6], TOPS (Temperature, oxygenation (Airway & Breathing), Perfusion, Sugar) [7].

During stabilization the neonate should be assessed for temperature maintenance, airway patency & breathing, state of circulation, fluid & hydration, feeding (sugar), medication to be administered. On assessment, if any of the above parameters is found to or to be compromised, remedial action should be taken immediately.

The entire process of referral has to be monitored not only before transportation but also during the transportation. To keep the baby warm during transportation. Skin to skin contact care (Kangaroo Mother Care), wrapping of baby (including head & limb, preferably covered in different layers), improvised containers, or transport incubator (rare) have to be used.

Most medico- legal problems associated with neonatal transportation are as a result of poor communication and provision of inadequate information, The condition of the baby, risk involved during transportation & financial implications of transportation & treatment at referral centre should be discussed with the family & should be documented. If the baby dies during transport-the ambulance should be stopped & Cardio Pulmonary Resuscitation (CPR) should be performed as per Neonatal Resuscitation Programme (NRP) guidelines [8].

Typically, newborn transportation teams should spend some time in stabilising the baby's condition prior to transportation to occur. Without adequate stabilisation, a clinical deterioration en route can be expected. Wherever possible in utero transfer is generally preferable and safe to newborn transfer. Transfer of the mother while still pregnant leads to improved survival and quality of survival for the baby. The baby should be taken to the nearest referral centre, by the shortest route, using the fastest possible mode of transportation (avoid too fast a travel leading to jerks/bumps due to poor road which may harm the sick baby. The success of neonatal transportation depends on early identification, pre referral stabilization, appropriate referral & care during transportation.

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