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### **Extreme prematurity and feeding intolerance in Low-Resource NICU: A case report**

#### **Abstract:**

Highly preterm neonates face significant obstacles, particularly in locations with limited resources where access to sophisticated diagnostic equipment and total parenteral nutrition (TPN) is often unavailable. Feeding intolerance, which causes low weight growth and elevated morbidity, is of primary concern. This case describes a preterm neonate (<25 weeks' gestation) delivered as part of a twin pregnancy, with the co-twin passing shortly after birth. The surviving neonate was stabilized with continuous positive airway pressure (CPAP), an umbilical venous catheter (UVC), and an orogastric (OG) tube. Due to the unavailability of TPN and imaging, a conservative, non-invasive feeding approach was implemented. The neonate experienced frequent vomiting, OG tube dislodgement, and suspected necrotizing enterocolitis (NEC), which were managed using clinical monitoring and supportive care. Kangaroo Mother Care (KMC) and minimal enteral feeding (MEF) were introduced, improving feeding tolerance and weight gain. By Day 40, the neonate transitioned to exclusive breastfeeding and was discharged on Day 55 with outpatient follow-ups. This case highlights the feasibility of KMC and MEF as effective interventions in low-resource NICUs to enhance feeding tolerance in extremely preterm neonates. Future research should explore structured feeding protocols and NEC screening adaptations for resource-limited environments to improve neonatal outcomes globally.

#### **Biography**

Nakeya Hamilton holds a Master's in Medical Science from Ponce Health Sciences University and is a medical student at St. George's University. She has published a case report on Extreme Prematurity and Feeding Intolerance in a Low-Resource NICU and is passionate about advancing neonatal care through clinical excellence, mentorship, and innovation in pediatrics.