

**EFFECT OF DELIVERY ROOM AMBIENT TEMPERATURE (DR-T) ON ADMISSION TEMPERATURE (IT) AMONG LATE PRETERM INFANTS (LPI) BORN AT 34 TO 36 WEEKS GESTATION**

**P. Srinivasan, P. Jain, M. Brandler**

*Pediatrics, New York Hospital Queens, Flushing, NY, USA*

**Background:** A large percentage of LPIs are hypothermic in NICU. Due to decreased subcutaneous tissue, LPIs are at increased risk for hypothermia in the Delivery and Operating Room (DR/OR). Hypothermia is cited as the primary reason for NICU admission in 5.2% of all LPIs and associated with prolonged Length of Stay (LOS).

**Aims:** To

- 1) determine relationship between DR-T and IT and
- 2) assess DR-T and intrapartum variables {DR-Resuscitation needs (DR-R), and abnormal maternal temperature > 38.0° F (AMT)} interaction and effect on LOS.

**Methods:** DR-T was recorded for all NICU admissions from DR/OR as a practice plan for monitoring IT. From January 2010 to November 2010. Data on all LPIs for DR-R, IT, maternal temperature and LOS collected. Univariate analysis between DR-T, IT and LOS were done.

**Results:** Total 538 NICU admissions, direct admissions from the DR/OR = 73%. LPIs = 71(13%). The mean DR-T was 72.7° F. Mean IT: 36.3° C. Low IT (< 36.0° C), need for DR-R, and AMT seen in 33.8%, 56.3%, and 11.3% respectively. Correlation between DR-T and IT was not significant. DR-T did not affect IT or LOS. Among all intrapartum variables only AMT showed significant correlation to IT (P = 0.0299).

**Conclusions:** DR temperature didn't affect IT or LOS among LPIs when maintained at a mean temperature of 72.7° F ± 1.92. Presence of AMT significantly influences IT independent of DR-T. Prewarming the DR for preventing hypothermia need further evaluation among LPIs and need to consider AMT as a significant confounding variable.