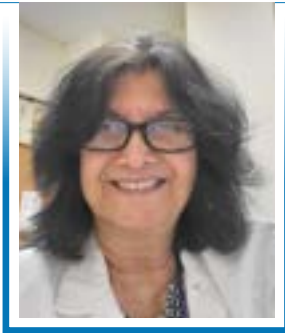


# PEDIATRICS AND NEONATOLOGY

July 25-26, 2019 | Amsterdam, Netherlands

Rita P Verma, Curr Pediatr Res 2019, Volume 23



## Rita P Verma

Nassau University Medical Center, USA

### CURRENT TREATMENT OF HYPOTENSION IN ELBW INFANTS: COMPLICATIONS AND CONTROVERSIES

#### BIOGRAPHY

Rita P Verma did her residency in Pediatrics, State University of New York Hospital and School of Medicine, Syracuse NY; Fellowship in Neonatal-perinatal Medicine: University of Illinois Hospital and School of Medicine Chicago, IL; Board certification: Pediatrics, Neonatal-perinatal medicine; Specialty: Neonatal-perinatal Medicine. She is Professor of Clinical Pediatrics. She attended as a Neonatologist. She is Director of Research, Department of Pediatrics. Her area of research interest mostly is in extremely low birth weight neonates, fluid and electrolyte management, hypotension, placental histopathology bio sketch. She worked at the State University of New York Hospital and School of Medicine, Stony Brook and the University of Maryland Hospital and School of Medicine, Baltimore as Associate Professor of Pediatrics before joining Nassau University Medical Center. She has published over 110 peer reviewed manuscripts and abstracts and has presented results of her research at various national and international meetings.

[ritaverma@aol.com](mailto:ritaverma@aol.com)

**Introduction:** Early postnatal hypotension (EPH) in premature infants is treated with vasopressor-inotropes (VI) in escalating doses, followed by hydrocortisone (HC) if VI therapy fails. There is no report on the adverse effects of this standard clinical practice.

**Objective:** To investigate the complications associated with the escalating treatments of hypotension with sequential inotropes and hydrocortisone in ELBW neonates.

**Methodology:** In a retrospective case-control study the complications and adverse outcomes associated with VI (VI) and HC (HCVI) treatments were compared with contemporaneous normotensive medication naïve controls (C) via standard univariate and multivariate analyses.

**Results:** VI (n=74) Vs C (n=124): Birth weight (BW), gestational age (GA) and receipt of antenatal steroid (ANS) did not differ. The occurrence of gestation associated diabetes mellitus (GDM) and risks for patent ductus arteriosus (PDA), intraventricular-periventricular haemorrhage (IVH), spontaneous intestinal perforation (SIP), ventriculomegaly (VM) and oxygen dependence at 36 postmenstrual week of life (BPD) were higher in VI group. HCVI (n=69) Vs C: HCVI recipients had lower BW, GA and receipt of ANS. The risks for IVH, BPD, air leaks and PDA were higher in the treated infants. The occurrences of SIP, VM and GDM did not differ while that of maternal hypertension trended to be less in HCIV recipients ( $p = 0.06$ ).

**Conclusions:** Hypotensive ELBW infants treated with vasopressor-inotropes or with hydrocortisone-vasopressor-inotropes are susceptible to IVH, BPD and PDA. Those who receive inotropes are at additional risks for SIP and VM. GDM increases the occurrence of hypotension which responds to VI and does not need HC. Maternal hypertension does not contribute to VI responsive and trends to decrease VI refractory hypotension.