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**Titration regimen of continuous intravenous sildenafil in neonates and children with pulmonary hypertension, a single center experience**

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**Background:** Continuous IV sildenafil has been used in neonates and children for the management of pulmonary hypertension, and it has been found to improve pulmonary hemodynamics. Nevertheless, guidelines and data describing dose and associated titration regimen of continuous IV sildenafil and its tolerability (degree to which adverse events of a drug can be tolerated) are still lacking.

**Methods:** This is a single center study describing the titration regimen of continuous IV sildenafil at Johns Hopkins All Children's Hospital between January 1, 2016 and March 31, 2019. Patients were included if they were  $\leq 18$  years of age, and had a diagnosis of PH secondary to PPHN, hypoxemic respiratory failure, congenital heart disease, chronic lung disease, or primary PH. Congenital diaphragmatic hernia and chromosomal disorders were excluded. Change in dose (mg/kg/hr.) and frequency of dose change were collected. Data collected to show a lack of tolerability includes the first documented heart rate (HR), blood pressure (BP), and oxygen saturation (O<sub>2</sub>sat) immediately following the change of dose for sildenafil, and significant change from baseline (HR above or below the normal range for age group and at least a 20 bpm difference, BP outside the normal range for age group and  $\leq 20/10$  mmHg change from the previous BP, a decrease in O<sub>2</sub>sat  $\leq 5\%$ , and presence of priapism for 24 hours after a dose titration. The primary objective will evaluate the tolerability of sildenafil titration in neonates and children. Secondary outcomes are to describe the titration regimen of continuous IV sildenafil. Continuous variables will be summarized using medians and interquartile ranges and categorical variables will be reported as numbers and percentages.

**Results:** In Progress

**Conclusions:** In Progress



*Presented at the 2019 Pulmonary Hypertension Association (PHA) Pulmonary Hypertension Professional Network (PHPN) Symposium.*