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Roseman University Research Symposium Abstract

Title

THE IMPACT OF A HOSPITAL PROTOCOL FOR NEONATAL ABSTINENCE SYNDROME

Introduction

Neonatal abstinence syndrome (NAS) has become one of the leading causes of extended-stay admissions among neonates nationwide. Patients diagnosed with NAS stay on average 22 days in the hospital before being discharged. The “Eat, Sleep, Console” (ESC) protocol was designed to maximize non-pharmacological measures to reduce symptoms of NAS. If pharmacologic treatments are deemed necessary, a daily morphine taper is used to reduce dependence on these controlled substances. Although not well understood, it is hypothesized that ESC can decrease length of hospital stay, as well as reduce the usage of morphine and other rescue treatments by nearly 50 percent according to Grossman et al. This protocol was implemented at St. Rose Hospital to establish a standard of care within the facility, and to understand the impact the ESC protocol on our neonatal patients.

Methodology

This retrospective review will assess the effectiveness of the ESC Protocol in neonates at risk for NAS. This study will include neonates in the NICU or PED units with a positive urine, cord, or meconium toxicology for polysubstance, and administration of oral morphine. Exclusion criteria include neonates with a gestational age of < 37 weeks. The primary outcome of this study is to observe the length of hospital stay. The secondary outcome would be cumulative doses of (scheduled and as needed) morphine given during the subjects’ stay. This study will evaluate these outcomes before and after September 2021 (ESC protocol implementation).

Results

As of February 2023, 140 patients have been reviewed. Analysis of this data collection and statistics will follow once the review period has ended. Interim results have been included in the research poster.

Discussion & Conclusion

Although proper documentation was not present in all patients diagnosed with NAS after ESC was implemented, it was strongly suggested that medical staff were performing mandated protocol. Further investigation has been initiated to ensure proper documentation will be completed going forward. Although the LOS was lower after ESC protocol implementation (i.e. the morphine group), there is no statistically significant difference. However, data collection is still ongoing

Presentation Keywords

Neonatology, Opiates, Pediatrics, Protocol, NAS, NOWS