THE INFLUENCE OF GESTATIONAL AGE, DELIVERY MODE AND ABDOMINAL WALL CLOSURE METHOD ON THE OUTCOMES OF NEONATES WITH NON-COMPLICATED GASTROCHISIS

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Aim of the Study: To evaluate if gestational age (GA), delivery mode and abdominal wall closure method influence outcomes in non-complicated gastroschisis (GC).

Methods: Retrospective review. NICU admissions for gastroschisis, 2008-2016. Primary outcomes: time to start enteral feeds (onEF), time to discontinue parenteral nutrition (offPN), length of stay (LOS).

Main Results: A total of 199 patients with GC were admitted to our unit. Patients initially operated elsewhere (n=12) were excluded. Patients with medical/surgical complications (n=62) were analyzed separately. The study included 125 cases of non-complicated GC. There were no statistically significant differences in the outcomes of patients born at late preterm (34.0/7 to 36.6/7; n=70) and patients born at term (n=40): onEF 19 (5-54) versus 17 (7-34) days (p=0.29), offPN 32 (12-101) versus 30 (16-52) days (p=0.46) and LOS 40 (18-137) versus 37 (21-67) days (p=0.29), respectively. Patients born before 34 weeks GA (n=15) had significantly longer onEF, offPN and LOS times compared to late preterm patients: 26 (12-50) days (p=0.01), 41 (20-105) days (p=0.04) and 62 (34-150) days (p<0.01), respectively. There were no significant differences in outcomes between patients delivered by C-section (n=62) and patients delivered vaginally (n=63): onEF 20 (5-50) versus 19 (7-54) days (p=0.72), offPN 32 (12-78) versus 33 (15-105) days (p=0.83), LOS 42 (18-150) versus 41 (18-139) days (p=0.68), respectively. There were significant differences in outcomes between patients who underwent primary reduction (n=37) and patients who had a silo (88): onEF 15 (5-37) versus 22 (6-54) days (p<0.01), offPN 28 (12-52) versus 34 (15-105) days (p=0.04), LOS 36 (18-72) versus 44 (21-150) days (p=0.04), respectively.

Conclusion: In our experience late pre-term delivery did not affect outcomes compared to term delivery in non-complicated GC. Outcomes were not influenced by the delivery mode either. Patients who underwent primary reduction had better outcomes than patients who underwent silo placement.