

Adverse perinatal and neonatal outcomes in pregnancies complicated by chronic abruption-oligohydramnios sequence: a retrospective review

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Introduction

Chronic abruption-oligohydramnios sequence (CAOS) is a rare obstetric condition characterized by recurrent vaginal bleeding followed by oligohydramnios without membrane rupture and is associated with severe adverse perinatal outcomes.

Objective: To characterize the clinical course, placental findings, and perinatal outcomes of CAOS, with emphasis on early vaginal bleeding as a potential warning sign.

Methods

We retrospectively reviewed seven CAOS cases managed at St. Vincent's Hospital from 2011 to 2019. CAOS was defined according to the Elliott criteria. Maternal characteristics, bleeding and ultrasound findings, delivery and neonatal outcomes, and placental pathology were reviewed.

Results

Mean gestational age at initial bleeding and delivery was 17.3 ± 6.2 and 25.1 ± 5.0 weeks, respectively. Six of seven pregnancies (85.7%) delivered before 28 weeks, and perinatal mortality was 57.1% (4/7). Chorioamnionitis and diffuse chorioamniotic hemosiderosis were identified in 71.4% and 42.9%, respectively. All survivors developed chronic lung disease and required mechanical ventilation.

Conclusion

CAOS was associated with extreme prematurity, high perinatal mortality, and severe neonatal morbidity. Early recurrent vaginal bleeding may represent an important warning sign, warranting close surveillance for subsequent oligohydramnios and adverse perinatal outcomes.

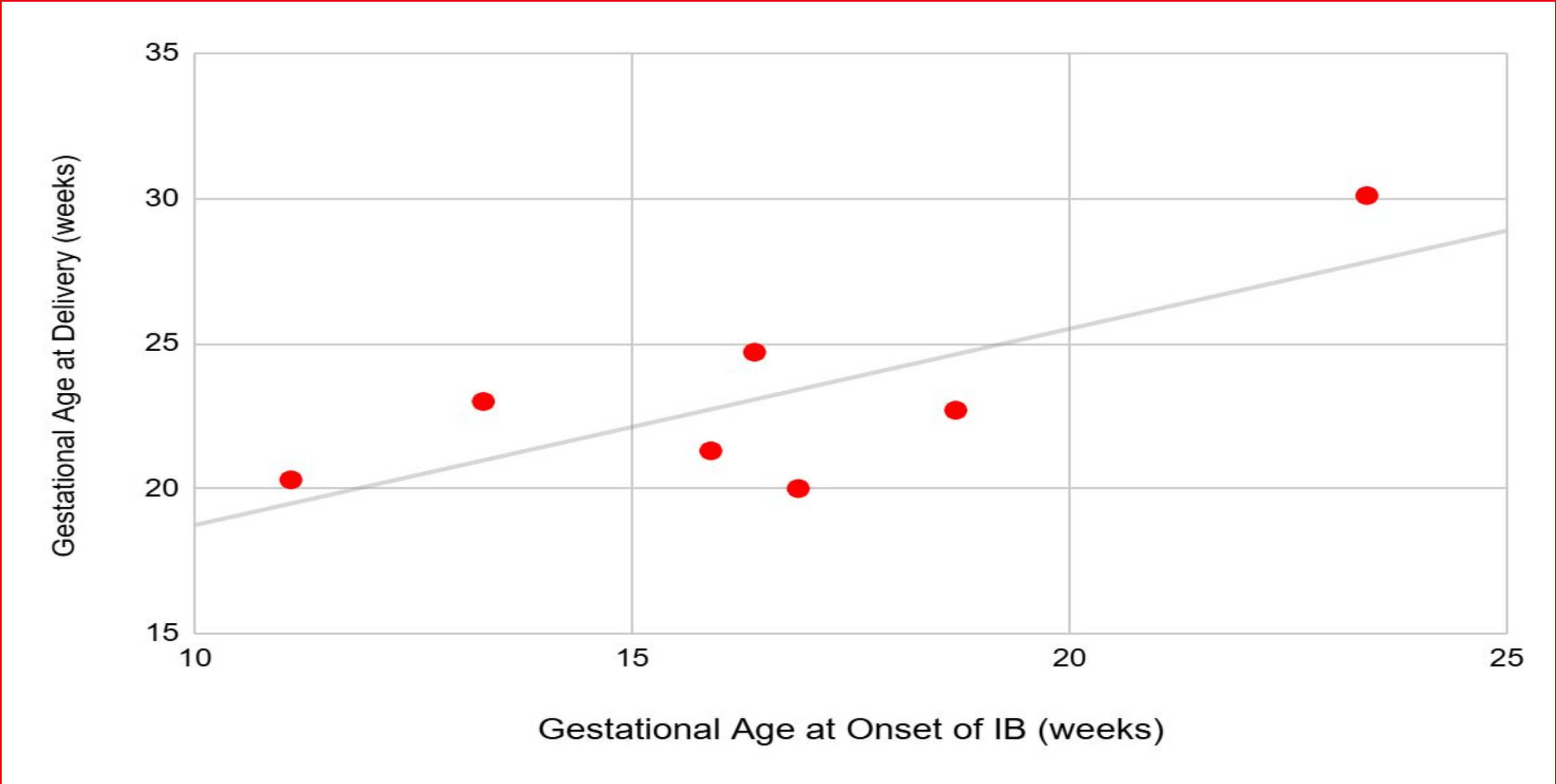


Figure 1. Relationship between Onset of Initial bleeding and Gestational Age at Delivery

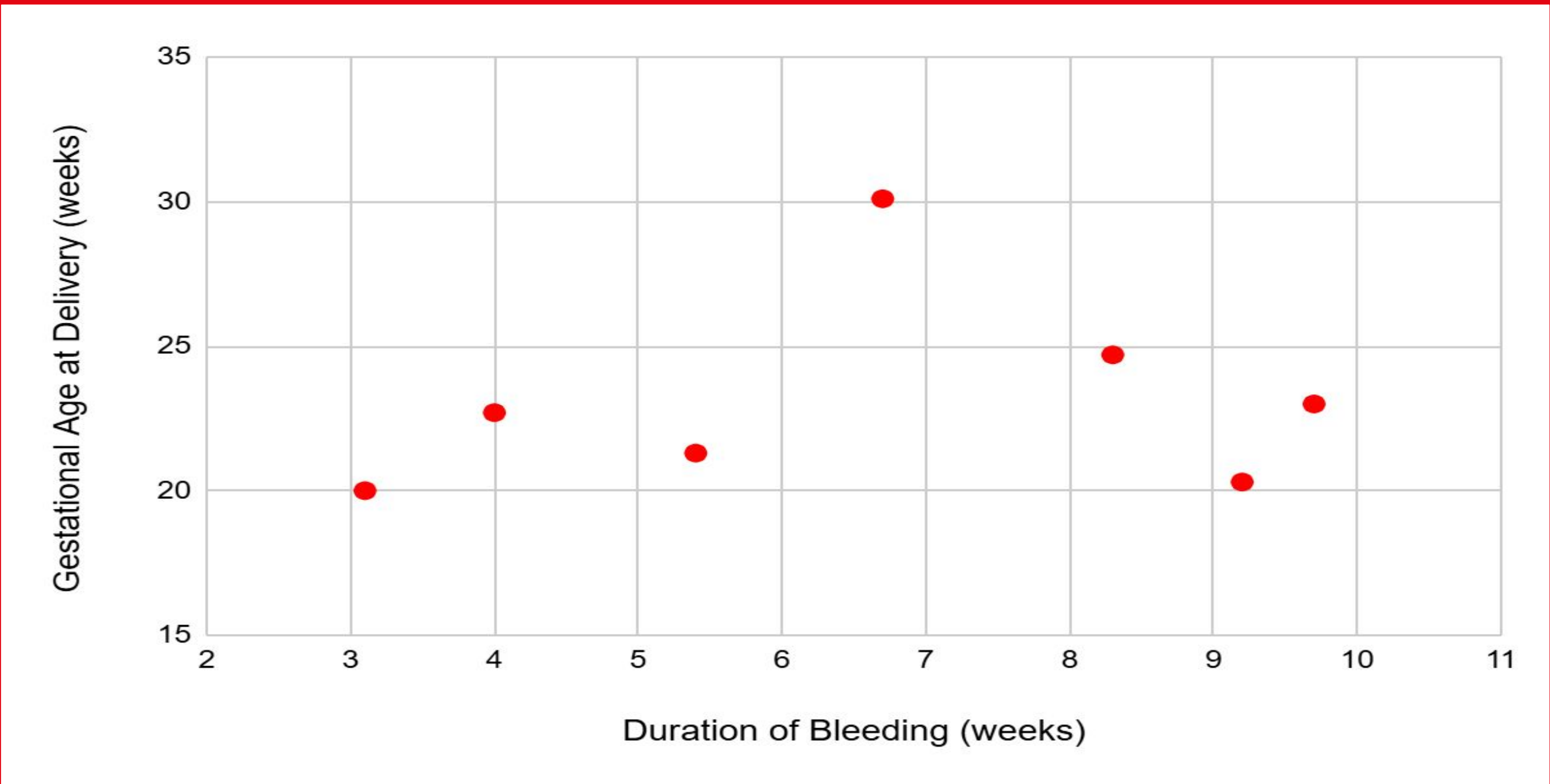


Figure 2. Relationship between Duration of Bleeding and Gestational Age at Delivery.