## Corrected Age at Bayley Assessment and Developmental Delay in Extreme Preterm

ارزیابی مستمر تکاملی نوزادان پرخطر خصوصا نوزاد نارس از اهمیت ویژه ای برخوردار است.

یکی از تست هایی که در ارزیابی همه جانبه چنین شیرخوارانی استفاده می شود تست بیلی می باشد.

نسخه سوم تست بیلی در ارزیابی در سن ۲۱ الی ۲۴ ماه در این مقاله برای ارزیابی تکاملی شیرخواران شدیداً نارس همراه با دقت بسیار بالاتری در بررسی و تشخیص به هنگام مشکلات تکاملی بوده است.

## **BACKGROUND AND OBJECTIVES:**

Research on outcomes of prematurity frequently examines neurode velopment in the toddler years as an end point, but the age range at examination varies.

We aimed to evaluate whether the corrected age (CA) at Bayley-III assessment is associated with

rates of developmental delay in extremely preterm children.

METHODS: This retrospective cohort study included children born at <29 weeks' gestation who

were admitted in the Canadian Neonatal Network between 2009 and 2017. The primary outcomes

were significant developmental delay (Bayley-III score <70 in any domain) and developmental

delay (Bayley-III score <85 in any domain). To assess the association between CA at

Bayley-III assessment and developmental delay, we compared outcomes between 2 groups of

children: those assessed at 18 to 20 months' CA and 21-24 months.

RESULTS: Overall, 3944 infants were assessed at 18–20 months' CA and 881 at 21–24 months. Compared with infants assessed at 18–20 months, those assessed at 21–24 months had higher odds of significant development delay (20.0% vs 12.5%; adjusted odds ratio, 1.75; 95% confidence interval, (1.41–2.13) and development delays (48.9% vs 41.7%, adjusted odds ratio 1.33; 95% CI,1.11–1.52 .(Bayley-III composite scores were on average 3 to 4 points lower in infants evaluated

at 21–24 months' CA (for instance, adjusted mean difference and 95% CI for language: 3.49

(4.66%-2.33%) Conversely, rates of cerebral palsy were comparable (4.6% vs 4.7%) between the

groups.

## **CONCLUSIONS:**

Bayley-III assessments performed at 21–24 months' CA were more likely to diagnose a significant developmental delay compared with 18- to 20-month assessments in extremely preterm children.