Commentary on "Bayley Scales of Infant Development Screening Test-Gross Motor Subtest: Efficacy in Determining Need for Services"

"How should I apply this information?"

Increased survival rate of infants born preterm has led to an increased number of infants at risk for developmental delay, and delayed gross motor skills are the most frequent early indicator of developmental delay. The authors propose that a screening tool, which identifies children in need of further testing and/or early intervention, would be valuable in many ways. They recommend the Bayley Scales of Infant and Toddler Development, Third Edition (BSID-III), Screening Test-Gross Motor Subtest as a quick, inexpensive tool that does not require extensive training to administer. It could be used in developmental follow-up clinics as an initial screening tool, saving the more comprehensive and costly testing for infants identified as delayed. The test also could be administered in pediatrician's offices, children's clinics, or community settings. Early identification may ensure early access to needed services.

"What should I be mindful about in applying this information?"

This study emphasizes gross motor screening; however, 6-month-old children may need further testing and/or intervention based on other issues, such as the risk factors listed in the article's Appendix. The reader should keep in mind that the authors' statement that "this study . . . suggests that delays for the young infants typically are in the motor area" may not be entirely accurate because no comparisons were made to other domains. They suggest that the 5 children found to be at risk by this test but receiving early intervention may have been referred for other health needs. Another concern related to use of the instrument by multiple disciplines involves interrater reliability. The authors provided the BSID-III test-retest reliability, but they do not indicate interrater reliability for the test in general or for the different professionals who assessed study participants. The sensitivity of this gross motor screening test for determining eligibility may be questionable because the same percentage of children who were determined at risk and competent were accepted for intervention. Results appear more accurate for children not accepted, and indicate high-test specificity when emergent and competent scores are combined. Overall, the results support the use of the BSID-III Screening Test to determine need for additional testing and referral. Further examination of the sensitivity, specificity, and likelihood ratios for the BSID-III Screening Test would be valuable.

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