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## Commentary on “Risk of Developmental Coordination Disorder in 8- and 9-Year-Olds Following Newborn Cardiac and Non-Cardiac Surgery”

### “How could I apply this information?”

Fairbairn and colleagues addressed the relevant issue of increased risk of developmental coordination disorder (DCD) in children with congenital heart disease (CHD). Advances in diagnostic techniques, surgical management, and postoperative care have increased survival rates of children with CHD, especially for those with complex CHD. The significant success of these advances exposed a heightened risk of brain vulnerability due to alterations in brain development or lesions occurring in utero, early postnatally, and onward.<sup>1</sup> A substantial body of evidence, including 2 recent systematic reviews and meta-analysis,<sup>2,3</sup> indicate that children with complex CHD, especially those with single ventricle physiology, have impaired motor development compared with their peers. Impaired balance, reduced manual dexterity, and decreased strength continue into childhood. In addition, difficulties with various aspects of executive function have been reported in children with CHD on performance measures and behavior scales.

### “What should I be mindful of when applying this information?”

While the article addressed a salient issue, it has 3 limitations: (1) it failed to note that 2 recent systematic reviews and meta-analysis had addressed this question already; (2) no information is supplied on attrition, but from the team's previous publications, it can be determined that, overall, 61% of children were lost to follow-up; (3) statistics are not well interpreted, confounder variables were not considered when calculating odds ratios (ORs), ORs with 95% confidence intervals are more relevant than *P* values. The latter means that the only significant difference in motor skills was found between children with CHD and controls. Motor behavior of children with other forms of surgery in early infancy was equivalent to that of controls. This means that the Fairbairn and colleagues article cannot be generalized and does not provide novel information: children with CHD have an increased risk of impaired motor behavior through school-age, including an increased risk of DCD.

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