Quality of Life and Parental Adjustment in Pediatric Pulmonary Hypertension

Some Methodologic Considerations

To the Editor:

We commend Mullen et al1 for their recent article in CHEST (February 2014) on quality of life and parental adjustment in pediatric pulmonary hypertension. It is indeed a very valuable research question that the authors have made an attempt to answer. However, we would like to point out a number of methodologic concerns that we fear might limit the validity of the study results.

The small sample size (N = 47) is likely to lower the statistical power of the study design. We are of the opinion that a generic scale like the Pediatric Quality of Life Inventory (PedsQL), Parent Report version, is not ideal for measurement of quality of life of the study population. A more disease-specific instrument such as the Cambridge Pulmonary Hypertension Outcome Review (CAMPHOR) scale, which was designed specifically for patients with pulmonary arterial hypertension and is primarily a patient report version, would have better suited the study purpose.2

Lack of adjustment for multiple comparisons and lack of generalizability of the single-site study pose further questions as to the validity of the study results. We would also like to point out that the assessment of psychiatric morbidity in children with pediatric pulmonary hypertension and inclusion of psychologic morbidity detected as a factor influencing both patient quality of life and parental stress would have been appropriate, considering the high psychiatric morbidity demonstrated in earlier studies of patients with pulmonary arterial hypertension.3 Not assessing and including the same (psychiatric morbidity in patients) as a confounding variable results in a lacuna that cannot be filled. We would recommend similar studies on a larger scale (preferably multisite) that would take into account the various methodologic challenges to shed more light on this valuable research question.

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References

Response

To the Editor:

We appreciate the comments of Drs Gnanavel and Robert regarding our recent article in CHEST.1 This study represents the largest sample to date on the psychosocial aspects of pediatric pulmonary hypertension (PH). In our article, we acknowledged limitations of the study, including small sample size and single-center design. We agree that a disease-specific instrument to assess quality of life in patients with PH could be useful; no such instrument has been validated for the pediatric age group. Optimally, this should use both self report and parental report. We agree that assessment of psychiatric morbidity in children with PH may be informative and could be addressed in additional studies. Finally, as we stated in our article, future multisite studies will be essential to further delineate the important psychosocial consequences of PH in pediatric patients.

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Financial/nonfinancial disclosures: The authors have reported to CHEST that no potential conflicts of interest exist with any companies/organizations whose products or services may be discussed in this article.

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6-Minute Walk Distance

Effect of Instructions

To the Editor:

We read with great interest the article by Weir et al1 published in CHEST (December 2013). The authors compared the effect of the instruction “walk as fast as you can” (fast walk) with the standard instruction “walk as far as you can in 6 min” (standard walk) for the 6-min walk test (6MWLT) in patients with pulmonary arterial hypertension, idiopathic pulmonary fibrosis, and other forms