

One Year Outcome of VLBW Infants

We read with much interest the research paper on growth and neurodevelopmental outcomes of VLBW infants at 1 year corrected age by Modi, *et al.* [1]. There are indeed, not many follow-up studies from India featuring long term outcomes of preterm infants. The present study, although a step in this direction, does not add substantially to the existing knowledge considering the modest sample size and follow-up timeline of 1 year. Following points need to be highlighted.

The sample size calculation is not mentioned and the blinding of the developmental paediatrician is not specified.

Almost half the infants (46%) in the cohort are small for gestational age (SGA). These babies are well known to have different outcomes than their AGA counterparts (whether term or preterm) in both short and long term [2-4]. Segregating SGA from AGA and analyzing the results separately would have given more credibility to the results, especially in this scenario wherein, there is an almost 3 week difference between mean gestational age of AGA and SGA infants, thereby complicating the results further! Also, comparing VLBW-SGA babies with NBW-SGA babies would be more meaningful as also comparing VLBW-AGA babies with NBW-AGA babies. The authors mention that there was growth catch-up shown by all babies in all anthropometric parameters. The difference in catch-up growth, between AGA and SGA babies if any, needs to be highlighted.

The authors have drawn conclusions that the developmental indices are significantly lower in VLBW babies than NBW counterparts at 1 year corrected age. Firstly, the sample size seems too small to draw any such conclusions. Secondly, the assessment was made at 1 year of age when some of the components of DASII scale which can only be performed for example at 18-24 months, cannot be applied (which the author also points out). Therefore, the significance cannot be judged appropriately. Thirdly, the statistical significance found in the study is unlikely to be of any clinical relevance as all the babies who were assessed scored above 90 on DASII scale. Similarly, the head size of - 1 SD although

on the smaller side, but is within normal limits. Developmental indices of > 90 are also within normal limits. Therefore it's very difficult to draw the conclusion of poor neurological outcome from the available data.

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REPLY

The readers have raised some pertinent issues. This study highlights the neurodevelopment of a relatively small sample at one year of age. The limitation of the study has been that it was a time bound study and so we had to limit the follow-up period to one year. This will happen in our scenario till the time prospective studies are funded and we look for research beyond the thesis or dissertation of postgraduates. The response is as follows:

Since this was a time bound study, consecutive VLBW infants born during the study period at a single centre were enrolled for the study sample and followed. The developmental paediatrician did all the assessment at the follow-up clinic at the hospital, in a masked manner.

We agree to suggestion by reader that outcomes of SGA and AGA infants might be different. Due to small number of subjects and even smaller on subgroups, the analysis didn't show difference in developmental indices of AGA and SGA infants. Thus we are not powered to