Determinants and Outcome of T Lineage Acute Lymphoblastic Leukemia in India

We thank Ramzan M and Yadav SP for their comments and observations as well as for adding to the body of literature on T lineage acute lymphoblastic leukemia (ALL) from India [1].

Authors report that the percentage of T lineage ALL at their institution is 14.2%, which is much lower than most previous reports form India. It would be very important to know the socioeconomic distribution of the families presenting with T lineage ALL at their predominantly non-public funded institution. It has been recently shown by investigators from Chennai that improvement in and hence; higher socioeconomic status is associated with a lower frequency of T lineage immunophenotype [2]. Differences, in socioeconomic strata, could partly or fully explain this disparity. Moreover, robust conclusions about the percentage of T lineage ALL are difficult due to small sample size in the authors study.

The definition of hyperleukocytosis is white cell count >100,000 per microliter and not >50000 per microliter. Hence the information presented is inaccurate. It would be helpful to know why children were treated with varying protocols and if there were any financial factors that influenced these decisions.

The overall survival (26.8%) at the authors institution is much less as compared to the outcome published by us [3].

The sample size is however far too small for head to head protocol comparison. From the given data it is also difficult to infer baseline characteristics.High-risk disease, nutritional comorbidities, sepsis, infrastructural and supportive care facilities and financial constraints influence treatment related mortality especially in the Indian setting. High treatment related mortality on the BFM arm further underscores the need of excellent supportive care and multidisciplinary management [3].

In conclusion, it is not only the choice of protocol that would influence the outcome of T cell ALL but also a complex web of a large number of other co-factors and confounders that would determine the ultimate outcome.

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REPLY

Xerophthalmia: Are We Turning a Blind Eye to It..?

In response to a letter published in the previous issue of Indian Pediatrics [1], I wish to make the following statements:

1. This exploratory study was an attempt to make a provisional estimate of the magnitude of xerophthalmia and its predictors in the field practice areas sub-served by the Dept. of Community Medicine. Lack of a specific sampling frame as is usually employed in multicentric community surveys and deemed to be more representative of the prevalence in the respective geographical areas; was a limitation in the study.
2. The Odds Ratio was used as a measure of the effect size, which is also a surrogate marker of the association between selected predictor variables and xerophthalmia. Also, computation of 'Adjusted' Odds Ratio is an integral component of multivariate binary logistic regression analysis, which we had used to demonstrate independent determinant variables of xerophthalmia. For example, the 'Odds' of having xerophthalmia in the presence of rural dwellings, predominant maize diet and maternal xerophthalmia were respectively 2.2, 3.3 and 1.2 in the current study.

3. Severe varieties of xerophthalmia have been reported to occur only rarely in large scale community based surveys conducted by the NNMB and ICMR [2,3]. We came across a few cases of corneal scarring, probably due to antecedent xerophthalmia as other common causes were ruled out by history. Two cases among the five with active corneal disease deserve a mention as they had reportedly died by the time we made a follow up visit. All these children were administered Vitamin A in therapeutic doses, nutritional advice given and were also referred for specialist eye care. The high death rates associated with keratomalacia as proven in other studies [4] helps to explain the low prevalence of keratomalacia observed in past and current community surveys.

4. The actual proportion of the potential beneficiaries of the National Vitamin A Prophylaxis Program is far from optimum in certain geographical areas as reflected in the surveys reflecting utilization of health care services in these areas [5]. It is indeed alarming that such a high prevalence of xerophthalmia should be present in children who are supposedly getting supplementation of Vitamin A 'regularly', under the Integrated Child Development Scheme (ICDS). Areas with a high magnitude of severe xerophthalmia indicate the existence of the lowest levels of health care utilization and perhaps none/minimal receipt of prophylactic vitamin A vis-a-vis areas with milder forms of deficiency. The package of MCH services promoted by the scheme is either not properly utilized by the community due to major deficiencies in the 'supply' or 'demand' or both these components of program implementation.

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