

REFERENCE

1. Girish G, Chawla D, Agarwal R, Paul VK, Deorari AK. Efficacy of two dose regimes of intravenous immunoglobulin in Rh hemolytic disease of newborn- a randomized controlled trial. *Indian Pediatr* 2008; 45: 653-659.

REPLY

We agree with statistical interpretation of the results made by Dr. Dutta. However, conclusions and interpretation made in our study must be viewed in light of some important facts. In absence of concrete data on duration of phototherapy in Rh hemolytic disease, calculation of sample size was based on our pilot data (unpublished). We enrolled the pre-calculated number of subjects, but because of wider dispersion of phototherapy duration, the primary outcome of our study, we were unable to reject the null hypothesis that 1 g/kg of IVIg is not better than 0.5 g/kg in reducing duration of phototherapy. Post-hoc analysis showed that the study was underpowered to detect a difference of 24 h in the duration of phototherapy- the intended difference. But the study had 80% power to detect a difference of 36 hr in the duration of phototherapy. The trend towards decreased duration of phototherapy

observed in 1 g/kg IVIg group should be interpreted with caution in light of the opposite trend of longer hospital stay in the same group and the illness severity of babies. Moreover, we were unable to detect significant difference in other outcomes like number of exchange transfusions, duration of hospital stay, number of packed red blood cell transfusions and peak serum total bilirubin. Our study was not powered to detect change in these outcomes, but detecting statistically meaningful difference in an important outcome like need of exchange transfusion will need huge sample size.

Furthermore, even a small difference will achieve statistical significance if sample size is big enough. Statistical significance testing does not reflect the magnitude of the effect, and the term "statistically significant difference" does not denote that the difference between a test and control group was clinically meaningful with regard to a desired outcome. We agree that reporting of no dose-effect relationship between IVIg and duration of phototherapy may not be correct statistically, but we based our conclusions on utility of clinical benefit than what our study was powered enough to detect.

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Audit of Measles Infection in Children From a Tertiary Hospital

Measles is an acute viral infectious disease caused by measles virus. The World Health Organisation (WHO) estimates that almost 1 million deaths occur each year due to measles, the majority (85%) in Asia and Africa(1). We conducted a retrospective study of clinical profile and outcome of measles infection at private urban tertiary care childrens hospital, during the period January 2006 till December 2007. Case records of children who were admitted during the

above period with clinical measles [defined as any person in whom the clinician suspects measles infection or any person with fever and maculopapular rash with cough or coryza or conjunctivitis(2)] or laboratory confirmed measles [defined as clinical measles infection with presence of measles specific IgM antibodies in serum(2)] were analyzed for age, sex, clinical features, measles immunization status, measles specific serum IgM antibodies, vitamin A supplementation status and measles related complications. During this period, 70 (0.3%) children were admitted out of 23172 hospital admissions. Of these 36 (51%) were boys and 34 (49%) were girls and the male: female ratio was 1.05:1. Fifteen (22%) children were less than one year old, 24 (34%) between one and 5 years, 23

(33%) between 5 and 10 years and 8 (11%) more than 10 years. Amongst the clinical features, fever was seen in 100%, rash in 86%, coryza in 71% and conjunctivitis in 67%. Koplik spots, pathognomic of measles were seen only in 29%. Leucopenia (total WBC count < 4000 cells/mm³) was seen in 46% and leucocytosis (total WBC count > 10,000) in 13%. Measles specific IgM antibodies by ELISA was done only in 42 (60%) and positive in 16 (23%) and there was clustering of cases between the months of January-June. It is unfortunate that 77% children had received measles immunization earlier thus stressing the need for revaccination and only 56 (80%) children received oral vitamin A supplementation. The proportion of children attacked by measles even after immunisation went on increasing with the increasing age, suggesting the waning of immunity with increasing age, which is similar to earlier study reported by Sharma, *et al*(3). With regards to measles related complications, one child had mild upper GI bleed and one had photophobia. All cases were brought under measles surveillance system and managed conservatively. There was no mortality. To conclude, measles is re-emerging with lot of children affected despite their previous immunization status though our findings represent only the tip of the

iceberg. Larger studies in future are needed to stress the importance of including second dose of measles in Universal Immunisation Program.

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Why Tuberculosis is a Difficult Disease to Target for Control or Elimination?

The journal needs to be complimented for turning attention toward growing challenge posed by tuberculosis (TB) in India by publishing two articles on the problem(1, 2). While the one provides insight in to clinical spectrum of pediatric TB(1), the accompanying editorial highlights the urgent need to have more research in to various aspects related to pediatric TB(2). I agree with the author's observations that in current tuberculosis control programs, the emphasis is on to prevent spread of TB by targeting sputum positive adult cases and

instituting them under DOTS while a large pool of pediatric and extra-pulmonary TB patients is neglected to a certain extent(2, 3).

As far as principles of disease control or eradication are concerned, there are at least three basic prerequisites to control/eliminate any disease entity- first to have a good, effective preventive tool (vaccine), second, an accurate diagnostic facility for active case detection for proper surveillance, and finally, an effective treatment modality of the target disease. Though there are many other prerequisites and requirements that need to be fulfilled before going for any public health disease control initiative, but these are the bare minimum and at least two of them need to be met before entertaining any hope of disease elimination or containment. For instance, take the cases of Smallpox and Polio eradication