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Reply

We appreciate the critical evaluation of our article. The primary aim of our report was to study the role of prophylactic infusion of aminophylline for prevention of apnea. The optimal dose is well documented in literature. *Figure 3* shows that we used aminophylline in doses ranging from 0.25 to 0.33 mg/kg/h. This study was not primarily designed to ascertain the optimal dose of amniophylline, but to use the drug in doses to maintain blood levels between 8-12. Thus a few patients, earlier in the study, received a little higher or a lower dose to titrate the steady state level. *Table III* also shows mean rate of dose infused and not rate in each case.

All patients in the study were normal preterms with no other risk factors and those with secondary apnea or those who were acidotic, or septic were excluded from the analyses. It is recommended that drug levels of theophylline are best done after five half lives, to get a steady state level. We agree with Rao and Narang that blood levels after 3 days of therapy could have detected toxic levels earlier; however, frequent drug estimations were not possible due to economic constraints.

Intermittent slow bolusing or continuous infusion of theophylline are equally effective and perhaps equally safe, provided bolusing is not done rapidly, which may increase the risk of producing toxic levels. This is precisely the reason and the point we wish to make as in most of our centres, slow bolusing with syringe pumps and blood monitoring of drug levels are not available. The chance of producing toxic levels is hence higher, than when infusing the drug as a slow continuous drip.

Finally, as mentioned under material and methods, any neonate who developed apnea was investigated to rule out a secondary cause, was treated for the same and excluded from analyses of results. A septic screen, including a lumbar puncture was done wherever secondary apnea was suspected.

While Rao and Narang have certainly raised many a pertinent point, we feel that given our circumstances, slow continuous infusions (rather than rapid bolusing) may still be more practical and less harmful in the prevention of apnea. For apneic episodes, we recommend bolusing of theophylline as it is an excellent respirogenic agent. We propose to study theophylline drug levels (when bolused versus when continuously infused) in yet another carefully designed study, where we hope to take into consideration all factors pointed out by these authors.

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