Comment on Asad Maqbool Ahmad et al. (JPMA 2018; 68: 1613)

Granulocyte-colony stimulating factor in neonatal sepsis with leukopenia: A prospective cohort study

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Dear Madam, We read the interesting article by Asad Maqbool Ahmad and colleagues entitled “Granulocyte-colony stimulation factor in neonatal sepsis with leukopenia: A prospective cohort study”. Neonatal sepsis is one of the leading causes of neonatal mortality.¹,² Clinical judgment and laboratory tools including Total Leukocyte Count (TLC), C-reactive protein (CRP), Immature to total neutrophil (I:T) ratio, procalcitonin, and blood culture.³

We have conducted a similar study on 50 neonates with early onset clinical sepsis that were being treated with antibiotics empirically. The sample size was 50 and it was randomly divided in two groups (n=25). Group A received 10 mg/kg/day GCSF for 3 consecutive days, and group B received placebo for the same duration. We also measured ESR, HS CRP, and I:T ratio in this study. In contrary to group B, there was a statistically significant raise in the TLC and absolute neutrophil count of group A (p value = 0.01). Meanwhile, considering the clinical course and other laboratory items (ESR, HS CRP, I:T ratio), there was no significant difference among the two groups. As a result, despite the lack of significant GCSF side effects in neonates, routine administration this drug for neonatal sepsis as an adjunctive therapy is not recommended.

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References