

LETTER TO EDITOR (VIEWER'S CHOICE)

EFFECT OF HIGH ENVIRONMENTAL TEMPERATURE ON THE MANAGEMENT OF FEBRILE INFANTS LESS THAN THREE MONTHS

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Febrile children comprise a substantial proportion of ambulatory pediatric visits. Many of these are under three months of age [1, 2]. Both minor and life-threatening infectious diseases including respiratory infections, occult bacteraemia and meningitis are common in this age group [1]. There may be considerable overlap in the clinical appearance of infants with fever without source due to either viral or bacterial infections [1, 2]. Strategies to identify infants less than 3 months of age with serious bacterial infections lack sufficient sensitivity, therefore conservative management with hospitalization, complete evaluation for sepsis (blood, CSF, urine cultures with CBC) and parental antibiotics till cultures prove negative is practiced by many institutions [1, 2, 3].

Saudi Arabia is a hot country with environmental temperature that might exceed 45°C during summer months; in addition, wrapping small infants is a cultural habit. Therefore it was our feeling that high temperature in some of these infants could be related to these factors. We are not aware of any published literature related to fever without focus in infants under 3 months from hot countries particularly Saudi Arabia.

In order to find out the magnitude of this problem, records of all infants less than 3 months of age who were admitted to the pediatric medical ward at our hospital in Riyadh with rectal temperature in excess of 38°C were reviewed over a period of 2 1/2 years. A total of 154 infants satisfied the study criteria, about 95 (61.7%) of the cases were below one month of age. Infections were identified in 50 (32.4%) of the included infants, among them bacterial infections were confirmed only in 16 (10.5%) of the cases. Twenty-five out of 154 infants (16.2%) had fever which was documented in the emergency room, yet after admission, they remained a febrile without using antipyretics or antibiotics. Based on initial clinical examination and screening investigations, all these cases were categorized as low

risk group. It is interesting that eight of these patients had temperatures between 39°C and 40°C and in one, it was over 40°C. Twenty-one (84%) of these cases were admitted during the hot months of April to October.

While it is recommended that all toxic appearing infants under 3 months should be admitted and subjected to full septic work up and antimicrobial therapy started till cultures prove negative, we don't recommend subjecting all low risk babies to full septic work up and antibiotic therapy as in some of these cases; high fever could be due to hot environmental temperature with or without wrapping particularly during the hot months of summer where environmental temperature in Riyadh can exceed 45°C and it might be wise to observe them for few hours either in the emergency room or in the ward before discharge.

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E-published: 1st July 2010. **Art#**40
