include use of drains measuring less than 10 mm in external diameter, use of “Z” insertion method, and making a purse-string for closure of the defect after removal of the drain [5].

Drains are not a substitute for good surgical techniques and must be used with caution. Careful insertion, and regular post-operative and post-removal inspection is recommended.

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REFERENCES

Simultaneous Two Site Blood Culture in Diagnosis of Neonatal Sepsis: Few Concerns

We read with interest the recent research paper by Tomar, et al. [1] in Indian Pediatrics. We have following comments and queries:

1. In the present study, authors mentioned that there was no polymicrobial growth in any of the cultures; what was the reason for this finding? Most of the studies in neonates report a frequency of 4% to 25% polymicrobial infections out of all bloodstream infections [2,3].

2. The results of this study differ from study by Sarkar, et al. [4], and author attributed it to small sample size and inclusion of inborn babies only in the study; however, to us it seems more due to gross differences in rates of culture positivity in two studies (9.2% vs 46%).

3. In the present study, incidence of candidemia was very high (one-third of total culture positive infections); is there any peculiarity in the study population for this heterogeneous result?

4. Although sending two blood cultures simultaneously improves diagnostic yield, it will add cost to patient care, demands more manpower, and will cause more pain to neonate. The problem of false positivity can be overcome by time to positivity (TTP) of blood culture. Various studies have given time to positivity for individual class of organism beyond which it can be considered as contaminant [5].

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REFERENCES

Authors’ Reply

We are thankful to the readers for giving us the opportunity to provide clarifications on our research.

1. Polymicrobial bacterial infections are often related to surgical interventions, complex congenital cardiac diseases, abdominal surgeries and lipid infusions [1]. We have a separate unit for surgical patients and we do not use lipid infusions for parenteral nutrition. These factors might partly explain absence of this phenomenon in our patients.

2. Difference in results from an earlier study [2] has been attributed to inclusion of outborn babies
referred from other hospitals, difference in demographic features and antibiotic usage rates in developed and developing countries. However, we agree that it may also be due to gross differences in rates of culture positivity between two studies.

3. Invasive candidiasis is an emerging cause of neonatal sepsis; seen more in late onset group and in those who have received broad spectrum antibiotics. Few other Indian studies on neonatal sepsis [3,4] have also reported high incidence of candidemia. This could be explained by more number of extramural babies referred from other hospitals, and larger proportion of lower birth weight and preterm neonates.

4. Problem of false positivity can be overcome by time to culture positivity but our primary objective was to improve diagnostic yield of blood culture. We agree that multiple blood cultures may seem to increase the cost of treatment and manpower, but as it improves yield, it may lead to more rational antibiotic therapy in the unit. Early targeted therapy is essential for reducing the burden of neonatal sepsis. Delay in diagnosis or non-specific therapy may lead to antibiotic resistance.

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REFERENCES


Quantum Jump in the Coverage of Mega Doses of Vitamin A Supplementation Program to Children in India

Government of India initiated the National Prophylaxis Programme against Nutritional Blindness due to vitamin A deficiency (VAD) in 1970 due to the high prevalence of VAD amongst children in the age group of 9-59 months in the country. The national scenario of VAD has changed significantly. However, the universal vitamin A supplementation is still being undertaken possibly for two benefits: (i) prevention of nutritional blindness due to VAD, and (ii) reduction in under-5 mortality rate (U5MR).

The existing scientific evidence suggests that the prevalence of Bitot’s spots among preschool children have reduced to 0.3% (range 0-0.7%), and is limited to isolated geographical pockets in the country [1]. A gradual reduction has been documented in U5MR from 74 (NFHS-3) [2] to 50 (NFHS-4) during 2005 to 2015 [3].

Table I presents NFHS-3 (2005-2006) and NFHS-4 (2015-2016) data on U5MR, infant mortality rate (IMR) and coverage of vitamin A supplementation in 35 states of India. The difference in U5MR and IMR amongst children is 9 (range 0 to 14), and is in the range of 0-5 in group A states. As 60% of the IMR is in the neonatal period due to causes such as accidents, genetic disorders, congenital anomalies and low birth weight, there is no biological mechanism by which vitamin A supplementation can possibly intervene and prevent these deaths. Large scale intervention studies and recent systematic reviews have also suggested that reduction in U5MR by vitamin A supplementation is negligible (2-3%) [4,5].

In spite of the strong evidence to discontinue vitamin A supplementation in the country, there has been a dramatic increase in the coverage of mega dose of vitamin A supplementation from 16% (NFHS-3) to 60% (NFHS-4) amongst children in the age group of 9-59 months (Table I). The Group A states with difference in U5MR and IMR in the range of 0-5 even, have a high coverage of vitamin A supplementation.

Government of India should adopt and implement evidence-based decisions for vitamin A supplementation as it may lead to wasteful expenditure of manpower and financial resources. Also, the toxicity of mega dose of vitamin A supplementation is a cause of great concern.