



Ultrasound-Guided Umbilical Venous Catheter Insertion to Reduce Rate of Catheter Tip Malposition in Neonates: A Randomized, Controlled Trial: Authors' Reply

Swati Manerkar¹ · Jayashree Mondkar¹ · Amandeep Kaur¹

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To the Editor: We are thankful to Yadav et al. for their appreciation towards our study where we could reduce UV catheter tip malpositions by using ultrasound guidance [1]. We used plain radiographs as the gold standard for identifying catheter tip position because this is the commonest and most easily available bedside tool in a busy NICU. In our study, 7 of 11 neonates had either high-placed or low-placed UVC [2]. The diagnostic sensitivity and specificity (with 95% CI) of plain radiographs are reasonable -0.90 (0.71–0.97) and 0.82 (0.53–0.95), respectively [3]. As suggested by the authors, the possibility of diagnosis of malposition due to poor visualisation cannot be ruled out with certainty, and therefore we welcome their suggestion of trying agitated saline (AS) contrast injection to help localize the tip [4]. Though recent literature suggests ultrasound with agitated saline contrast injection should be the gold standard for catheter tip localization, creating agitated saline is not a standard practice in most units. Also, one may encounter untoward problems while making AS or administering it to tiny sick neonates without adequate training [3, 4].

Nevertheless, this technique will surely be considered in future studies for improving the efficacy of ultrasound-guided catheter insertion.

Declarations

Conflict of Interest None.

References

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✉ Swati Manerkar
drswatimanerkar@gmail.com

¹ Department of Neonatology, Lokmanya Tilak Municipal Medical College & General Hospital, Mumbai, Maharashtra 400022, India