insertion of CVC still can be regarded as a blind procedure that is guided by anatomical landmarks. I appreciate that pneumothorax is a serious complication and the case report is interesting, but the emphasis should have been laid upon doing the X-ray for confirming the positioning of the CVP line and subsequent management of the patient rather than doing radiography with the aim of identifying complications of CVP line insertion. I would summarily suggest initial auscultation immediately after placement of CVP line for complications like pneumothorax, etc.

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Sir,
I read the recent publication on electrolytes assessed by point-of-care testing (POCT) in sepsis with great interest.

Chacko et al. concluded, “Clinicians should be aware of the difference between whole blood and serum electrolytes, particularly when urgent samples are tested at point of care and routine follow-up electrolytes are sent to the central laboratory” and “A correction factor needs to be determined at each center.”

Indeed, the result in this work can be expected. Two samples that are processed at different time intervals can usually have different laboratory data. To compare between two analyzers, the data on the quality control and the reference range of the two systems have to be presented. These are the basic things in laboratory medicine that can result in difference of data from two analyzers. Finally, I would like to make a comment on the suggestion to find the correction factor. This needs a clarification as such correction factor might be usable only if the same kinds of specimens are used. In case venous blood specimen is used for analysis in central laboratory and arterial blood is used for analysis by POCT tool, it should be corrected.

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Authors’ reply

Sir,
The authors have raised some queries on our submission. We agree with the statement, “two samples that are processed in different times can have different
laboratory data”. In our paper, we have stated that paired samples were collected at the same time from each patient. Thus, time difference in assay was small and unlikely to contribute to the differences observed.

As pointed out, data on quality control and reference ranges of the two systems are important. The % coefficient of variation for both analyzers has been described in detail in the Section “Materials and Methods”. Since the two analyzers use different samples (whole blood vs. serum), it was not possible to use the same quality control materials for both the analyzers, particularly as the manufacturer often compensates the material specifically for the conditions of their analyzer.

As regards the reference range, no specific reference range was used for whole blood samples. However, following this study, a lower range probably needs to be defined for whole blood samples, given that the whole blood potassium was lower by 0.3 mEq/L and sodium was lower by 4.0 mEq/L. As correctly pointed in the letter, our study determined a correction factor between arterial whole blood and serum and not between arterial whole blood samples (that is commonly analyzed at point of care) and venous serum samples (that are usually sent to the central laboratory). Thus, as stated in our paper, each center needs to do its own study to determine the correction factor that needs to be applied for the different types of samples that are sent for testing.

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