Correlation of measurement of optic nerve sheath diameter with ultrasound and magnetic resonance imaging

Sir,

We thank Mishra et al.,[1] for the interest shown in our article[2] on the correlation of optic nerve sheath diameter (ONSD) using ocular sonography with magnetic resonance imaging.

In response to the queries raised in previous issue pertaining our study, we would like to bring your attention to the following points. The ultrasonography was performed by an intensivist of our team comprising four consultants and two senior registrars who have been trained in visualizing optic nerve sheath diameter after attending the workshop for duration more than 4 h, which has been recommended in the literature.[3] Consultant radiologist who was part of the study aided in measuring the magnetic resonance imaging (MRI) – optic nerve sheath diameter.

Inter- and intra-observer variability for ONSD has been shown to be good for sonographic measurements made 3 mm behind papilla and MRI at both 3 and 5 mm depth.[4]

We had earlier published ultrasound based detection of raised intracranial pressure.[5] All our consultants and senior residents have been trained to measure optic nerve sheath diameter for duration not <6 h. This study was done to check for numerical accuracy of ONSD ocular sonography readings when compared MRI-ONSD readings in meningitis patients.

Acknowledgments
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References


3. Potgieter DW, Kippin A, Ng F, McKean C. Can accurate ultrasonographic measurement of the optic nerve sheath diameter (a non-invasive measure of intracranial pressure) be taught to novice operators in a single training session? Anaesth Intensive Care 2011;39:95-100.
