Dear Sir,

We have read with great interest the recent study of Panughpath, et al. revealing the utility of mobile devices to detect and assess intracranial hemorrhage on head computed tomography scan performed in the emergency setting. Authors revealed a mobile device with appropriate web-based picture archiving and communication system is effective in the detection of intracranial hemorrhage present on head CT scan. In our opinion, some points about the study are not sufficiently clear.

In their study, authors compared the iPad review of head CT scans with the review on a two megapixel Dell UltraSharp™ 2007FP liquid crystal display (LCD) desktop monitor (Dell Inc.). The matrix size of this desktop monitor is not satisfactory for diagnostic imaging, and it has been suggested that the matrix size of monitors used for the interpretation of non-mammography medical images by the radiologists or where the primary treatment decision is made is in the absence of an interpretative report such as in Emergency department must be at least three megapixel. Besides, it was shown that the aspect ratio of diagnostic monitor was 4:3 at table 1 in the article of Panughpath, et al. [Table 1]. The American College of Radiology recommends the well-suited aspect ratio (width to height) of diagnostic monitors for the presentation of radiographic images is 3:4 or 4:5.

Secondly, the authors affirmed that the iPad reviews of head CT scans were made by two radiologists independently, and the studies were reviewed on the workstation by both radiologists after one week interval. They also reported that all discordant studies were further assessed by two senior fellowships trained in neuroradiology. Nevertheless, they did not state the inter-intra observer variability of this evaluation.

In discussion section, the authors revealed that minimum contrast ratio for display device for images of non-mammography scans should be more than 50:1. This contrast ratio is not adequate for diagnostic monitors, and not fitting with the American College of Radiology recommendations. It has been suggested that the contrast ratio should be more than 600:1 for diagnostic monitors for radiologists, and more than 500:1 for medical staff and consultants (non-radiologists).

We hope that above-mentioned comments will add to the value of the article by Panughpath et al.

Sema Yildiz, Nurefsan Boyaci, Dilek Sen Dokumaci, Ekrem Karakaş
Department of Radiology, Harran University School of Medicine, Sanliurfa, Turkey
E-mail: drsemayildiz@yahoo.com

References