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Ultrasound assist devices – are they useful for interventions?

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To the Editor,

Interventional procedures performed using real time ultrasound (US) guidance have improved safety and outcomes in a variety of medical specialities. There are variations in technical and accuracy aspects despite using US. US assist devices are suggested to improve these individual variations [1-4]. Each assist device is designed to reduce technical variability, help in rapidly delivering accuracy, and provide clinical confidence in hitting the target area by increasing stability. It works as a vital component for guiding a needle or catheter during ultrasound procedures in order to perform a block or precise needle placement. However, the use of US assist devices and efficacy in anaesthesia has not yet been investigated. We carried out a survey on the usage of US assist devices and their efficacy for interventional procedures. Our aim through this survey was to establish views and practice regarding the usage of US assist devices and quantify efficacy among the users.

A survey questionnaire was sent out to over 500 doctors via the survey monkey website. It consisted of a qualitative part to establish the demographics of the setting of the hospital, speciality using US and indications of US interventions, and awareness of US assist devices. For the respondents who had experience of using US assist devices, further questions quantified the efficacy and usefulness of such devices. We received 302 responses. Analyses of responses are detailed in figure 1-3.

The survey showed that good awareness of ultrasound assist devices exists amongst the users of US; however, only a small proportion used it for clinical purposes. The users of the assist devices found that they increased the ease of interventional procedures and reduced complications.

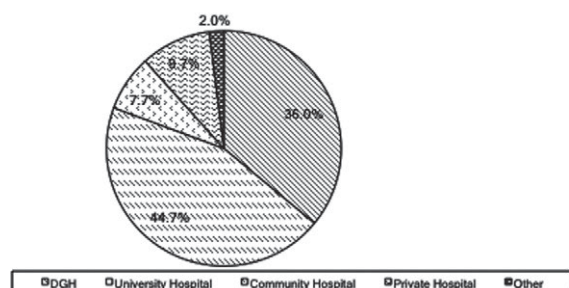


Fig 1. Setting of Hospital

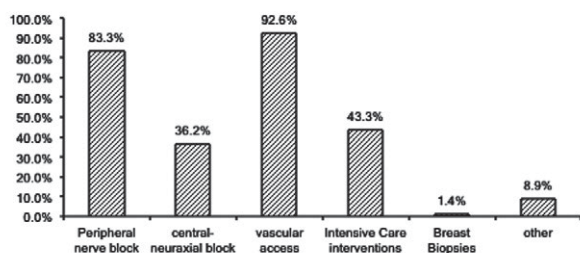


Fig 2. Indications of USG interventions in clinical practice

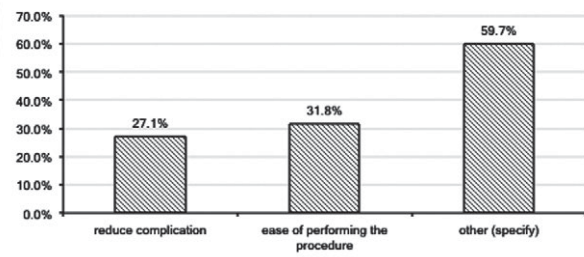


Fig 3. Has use of USG assist device influenced or altered the outcome in your practice?

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