

## ABSTRACT OF SELECTED PAPER

### **The Use of Portable Real-Time Ultrasound Scanner for Estimating Bladder Volume\***

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A prospective study using a hand-held ultrasound scanner was made on male patients with neuropathic bladders admitted to the National Spinal Injuries Centre. Eighty-two estimations of the bladder volume were made and in each case the actual volume of the urine obtained by catheterisation, (performed soon after the estimation), was recorded. When the measured volumes were plotted against the estimated volumes it was found that in more than 50 per cent of cases the estimates lay within 20 per cent error of the measured volume. In an additional study it was found that the accuracy of estimations at low bladder volume (bladder volumes of less than 150 ml) was comparable to the previous study. It was easy to train the nursing and catheter team in the use of this portable ultrasound scanner. We believe that this technique offers a safe alternative to catheterisation for estimating bladder volume and the accuracy is sufficient for most clinical purposes.

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