A Prospective Evaluation of Surgeon Performed Sonography as a Screening Test in Blunt Abdominal Trauma

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Abstract

***Introduction**: Sonography has found a role in the evaluation of patients with abdominal injury. However, the accuracy of sonography as performed by non-radiologists remains controversial. This study aims to determine the accuracy of focused abdominal sonography for trauma when performed by surgeons. **Materials and Method**: Over a 1-year period, 48 patients with abdominal injury were initially evaluated for free intraperitoneal fluid by sonography. These tests were performed by 2 surgeons who had received instructions and performed a minimum of 30 examinations. Sonographic findings were then compared with other diagnostic modalities including computed tomography (CT) scan, diagnostic peritoneal lavage and exploratory laparotomy. **Results**: The sensitivity, specificity, positive predictive value, negative predictive value and accuracy for sonography were found to be 0.86, 0.92, 0.89, 0.90 and 0.89, respectively. Although not specifically sought for, 2 cases of solid organ injury and 1 haemothorax, which were missed in initial examinations and X-rays, were detected on sonography. **Conclusion**: In conclusion, our initial experience suggests that local surgeons can perform a focused sonographic examination for trauma with acceptable accuracy. Although sonography lacks the sensitivity of diagnostic peritoneal lavage and the accuracy of CT scan, the diagnostic algorithm for abdominal trauma should include sonography as a screening test.*

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Key words: Blunt abdominal injury, Computed tomography, Diagnostic peritoneal lavage, Focussed abdominal sonography for trauma

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