

**GS17****\*THE VALUE OF EARLY CT IN BOWEL OBSTRUCTION****B. P. MORRIS, R. TURNER, A. DE COSTA, J. GLEESON AND T. SLACK***Cairns Base Hospital, Cairns, Queensland*

There is increasing use of CT in intestinal obstruction to delineate those patients requiring expeditious surgical intervention from those in whom conservative management is appropriate. We sought to assess the accuracy of CT in predicting those patients for whom conservative management would suffice. A mixed prospective-retrospective series had 75 patients with a clinical diagnosis of intestinal obstruction and a CT performed within 24 hours of hospital admission. Patients were excluded if there was an immediate indication for surgery eg peritoneal irritation or shock. A positive diagnosis was defined as suitability for conservative management based on CT absence of an obstructing lesion and/or progression of contrast. A negative diagnosis was defined as a high-grade obstruction, signs of strangulation or a lesion requiring operation eg volvulus or tumour. Sixty-two cases (82.7%) had a history of abdominal surgery. Forty-one (54.7%) underwent operative intervention during their index admission. Diagnostic accuracy measures for CT in predicting successful conservative management were: sensitivity 91.4%, specificity 77.5%, positive predictive value 78% and negative predictive value 91.2%. In those with prior abdominal surgery, these results were 96.7%, 71.9%, 76.3% and 95.8% respectively. CT is highly effective in detecting bowel obstruction cases that do not require operation and also in predicting those cases that actually do. These measures are slightly improved when selecting patients with previous abdominal surgery. CT scanning may therefore be incorporated into a diagnostic algorithm for acute bowel obstruction. Future studies may benefit from more standardised assessment criteria and cost-effectiveness analyses.