

FOCUSED VS. SCREENING CT SCANS FOR EVALUATION OF NON-TRAUMATIC ABDOMINAL PAIN IN THE EMERGENCY DEPARTMENT

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Objective: To evaluate the utility of CT scans for patients with abdominal pain in the emergency department. We compared focused scans (having a single diagnosis in mind) and screening scans (having no or more than one diagnosis in mind) with the hypothesis that focused scans would reveal pathology more often than do screening scans. Treatment plans and patient outcomes were also be contrasted between the two populations.

Methods: This study has both a prospective and retrospective component. One hundred patients who presented to an academic medical center with abdominal pain and underwent an abdominal CT were enrolled in the study. ER attendings indicated whether the scan was focused or screening. A chart review was later completed to gather outcomes data for each of the enrolled subjects.

Results: Thirteen patients were excluded due to incomplete records. Of the 61 patients having a focused CT, pathology was identified on 63.9% of the scans, which did not significantly differ from the 65.4% of scans that revealed pathology in the 26 patients in the screening group. The total number of patients deemed requiring admission was significantly reduced by 15% following the CT scan ($p = .049$). The focused group, while reduced, did not show a significant difference. The screening group did show a significant difference, with 8 fewer patients being admitted than initially planned ($p = .03$).

Conclusions: While there was no difference between the focused and screening groups in rate of pathology (hypothesis rejected), there was a significant decline in number of patients requiring admission to the hospital when comparing emergency physicians' pre and post-CT treatment plans. This study supports the use of CT scanning for patients with abdominal pain in the ER.