ROLE OF CT ENTEROGRAPHY IN EVALUATION OF SMALL BOWEL DISORDERS

Thesis

Submitted for Fulfillment
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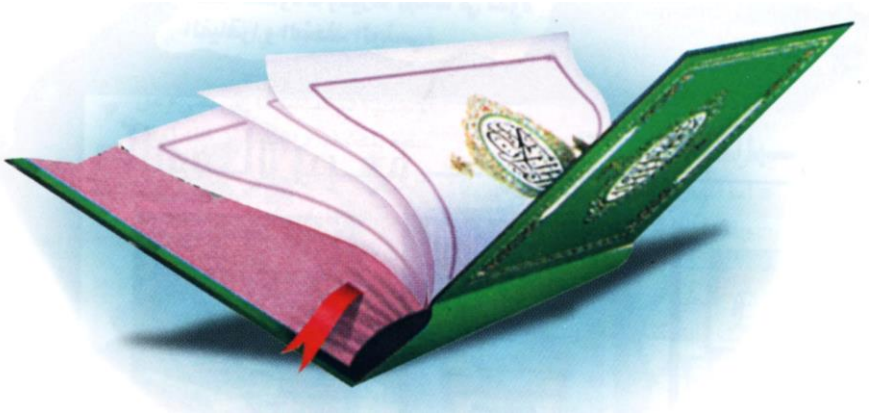
بِسْمِ اللهِ الرَّحْمَنِ الرَّحِيمِ

وَقُلِ اعْمَلُواْ فَسَيَرَى اللّهُ عَمَلَكُمْ وَرَسُولُهُ وَالْمُؤْمِنُونَ



صدق الله العظيم

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List of Abbreviations

Abb.	Full term
2D	*Two Dimensional*
3D	*Three Dimensional*
AIP	*Average Intensity Projection*
CD	*Crohn's Disease*
CT	*Computed Tomography*
CTA	*Computed Tomographic Angiography*
CTE	*CT Enterography*
GISTs	*Gastro Intestinal Stromal Tumours*
GIT	*Gastro Intestinal Tract*
IBDs	*Inflammatory Bowel Diseases*
IMA	*Inferior Mesenteric Artery*
IV	*Intra-Venous*
MDCT	*Multi-Detector Computed Tomography*
MIP	*Maximum Intensity Projection*
MPR	*Multi-Planar Reformatting*
MRI	*Magnetic Resonance Imaging*
MSCTE	*Multi-Slice Computed Tomographic Enterography*
SBFT	*Small bowel follow through*
SMA	*Superior Mesenteric Artery*
SMV	*Superior Mesenteric Vein*
SSD	*Surface shaded display*
US	*Ultra Sonography*

Abstract

Background: The small bowel has always been considered a difficult structure for evaluation, because of its anatomical characterization and its position in the digestive tract. CT Enterography offers better small bowel visualization compared to standard Abdomino-pelvic CT and provides complementary diagnostic information to capsule endoscopy and MR Enterography.

Objectives: Purpose of this work is to study the role of CT Enterography in the assessment of different small bowel diseases.

Patients & methods: the study was performed over 43 patients in the period from December 2013 till February 2018, Complaining from abdominal pain, chronic diarrhea, loss of weight and recurrent vomiting. CT Enterography technique was performed by luminal distention using a large volume of neutral oral contrast agent and intravenously administered contrast agent optimizing bowel wall enhancement to maximize conspicuity of small bowel pathology. All patient had full clinical assessment and laboratory investigations and results were compared to the upper and lower GIT endoscopies as well as and histopathology results.

Results: the most frequent finding were inflammatory bowel disease with 95% sensitivity, neoplastic with sensitivity 92%, malabsorption 83.4% sensitivity and vascular diseases

Conclusion: CT Entrography is a safe well tolerated imaging technique that represents simple and effective method in assessment of different small bowel diseases as it is sensitive to early intestinal wall changes and evaluating the associated mesenteric and extra intestinal alterations as well.

Key words: CT Entrography, Small Bowel, Chron's D**Introduction**