Role of CT enterography in chronic diarrhea patients

Thesis

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By

Rasha Mostafa Mohamed Ali

MSc. Of radiodiagnosis, Cairo University

Supervisors

Prof.Dr. Reda Saad A.ELlatif
Professor of radiodiagnosis
Faculty of medicine
Cairo University

Dr. Marwa Shaker A.Elfattah
Lecturer of radiodiagnosis
Faculty of medicine
Cairo University

Dr.Tamer Mahmoud Elbaz
Lecturer of endemic hepatogastroenterology
Faculty of medicine
Cairo University

Faculty of Medicine

Cairo University

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ABSTRACT

Chronic diarrhea is a common patient complaint and is defined as lasting more than 4 weeks. A wide range of problems can cause chronic diarrhea; some of the most common causes include, inflammatory bowel disease (Crohn's disease and ulcerative colitis), malabsorption syndromes, and chronic infections. ***(Juckett et al, 2011)***

CT enterography is a new non-invasive imaging technique that offers superior small bowel visualization compared with standered abdomino-pelvic CT, and provides complementary diagnostic information to capsule endoscopy and MRI enterography . CT enterography is well tolerated by patients and enables accurate ,efficient assessment of pathology arising from the small bowel wall or surrounding organs. ***(Ilangovan et al, 2012).***

The greatly improved spatial and temporal resolution provided by multidetector CT scanners, combined with good luminal distention provided by negative oral contrast agents and with good bowel wall visualization, have made CT enterography the main imaging modality not only for investigating proved or suspected inflammatory bowel disease but also for detecting occult gastrointestinal tract bleeding, small bowel neoplasms, and mesenteric ischemia ***.(Elsayes et al, 2010).***

Although capsule endoscopy provides better mucosal visualization, it does not allow visualization of abnormalities outside the bowel lumen. Moreover, capsule endoscopy cannot be performed when the presence of a stricture is suspected; the endoscopic capsule may become lodged at the diseased segment and cause obstruction. CT enterography allows

excellent visualization of the entire thickness of the bowel wall and depicts extraenteric involvement as well, providing more detailed and comprehensive information about the extent and severity of the disease process. ***(Elsayes et al, 2010)***

KEY WORDS

Multi-slice computed tomography, enterography, chronic diarrhea.

List of Abbreviations

2D	**:**	Two Dimensional
3D	**:**	Three Dimensional
CARD 15	**:**	Capase activation and recruitment domain
CD	**:**	Crohn's Disease
CT	**:**	Computed Tomography
CTA	**:**	Computed Tomographic Angiography
CTE	**:**	CT Enterography
ERCP	**:**	Endoscopic retrograde cholangiopancreatography
EUS	**:**	Endoscopic Ultrasound
GISTs	**:**	Gastro Intestinal Stromal Tumours
GIT	**:**	Gastro Intestinal Tract
HIV	**:**	Human immunodeficiency virus
HU	**:**	Housfield unit
IBDs	**:**	Inflammatory Bowel Diseases
IMA	**:**	Inferior Mesenteric Artery
IV	**:**	Intra-Venous
MABP	**:**	Malabsorption pattern
MDCT	**:**	Multi-Detector Computed Tomography
MR	**:**	Magnetic Resonance
MRI	**:**	Magnetic Resonance Imaging
MSCT	**:**	Multi-Slice Computed Tomography
MSCTE	**:**	Multi-Slice Computed Tomographic Enterography
ROI	**:**	Region of interest
SBFT	**:**	Small bowel follow through
SMA	**:**	Superior Mesenteric Artery
SMV	**:**	Superior Mesenteric Vein
UC	**:**	Ulcerative colitis
US	**:**	Ultra Sonography

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