SUMMARY AND CONCLUSION

The aim of this study was to evaluate the role of multidetector CT in the assessment of different gastric and intestinal malignant neoplasms. Actually, recent advances in CT technology and 3D imaging software have sparked renewed interest in the imaging of the gastrointestinal tract and multidetector CT has offered several potential advantages over single-section techniques, these advantages include: faster data acquisition, greater anatomic coverage, and comparable coverage times with much thinner section collimation together with better resolution. It also allows high-quality multiplannar reformation and three dimensional reconstructions of different images.

In case of gastric malignant neoplasms; gastric cancer represents one of the major causes of death from malignant disease worldwide. There are several pathologies affecting the stomach with different CT representations of these pathologies include: adenocarcinoma, lymphoma, carcinoid tumors, metastases and gastrointestinal stromal tumors. Double-contrast barium meal and endoscopy are useful in demonstration of early gastric cancer; however, both have limitations. Endoscopic ultrasonography has been reported to be the most effective diagnostic modality for T staging of gastric cancer as it can detect the gastric wall with five layers of its internal structures; however, it has limitations in the depth of the field of view and it is operator dependant.

Some authors have supported the use of laparoscopy, however, it can not be routinely done owing to its invasive nature. With the aid of CT and the more recent advances in visualization of the stomach as using water as a contrast media, it was possible to identify the lesion more. The

usage of water allowed better evaluation of the enhancing gastric wall and allowed better detection of subtle disease. It also does not interfere with 3D imaging and CT angiography.

Small bowel neoplasms are relatively uncommon representing 25% of gastrointestinal neoplasms. Actually, small bowel neoplasms are usually over looked as they usually present late with non-specific symptoms, also they are small in size and are uncommon. Different pathologies that affect the small bowel include: adendcarcinoma, lymphoma, carcinoid tumors and GISTs.

The small bowel CT enterography is a recent technique used for evaluation of small bowel tumors. It is considered an important diagnostic tool, as it can visualize the entire gastrointestinal tract as well as extra luminal structures such as lymph nodes. The MDCT has renewed the interest in detection and staging of these malignances with the advanced 3D imaging capabilities.

The colorectal cancer is the fourth most frequently diagnosed cancer in the United States. Large bowel malignant neoplasms include: adenocarcinoma, lymphoma and carcinoid tumors.

MDCT colonography has an excellent sensitivity and specificity for detection of colorectal neoplasms.

So in conclusion MDCT with 3D imaging is an important diagnostic tool for suspected malignant lesions, post -operative tumor recurrence or residual lesions of gastric and intestinal origin which should be considered. It is also important in the detection of the affected lymph nodes and extension into nearby organs and distant metastases.