SUMMARY & CONCLUSION

Colorectal cancer is a curable disease if detected and treated early. Screening may decrease the morbidity and mortality rates associated with colorectal cancer by enabling detection and removal of premalignant adenomatous polyps before they become invasive cancers however colorectal cancer is considered one of the most common malignant tumors allover the world and one of the leading causes of death. Its highest incidence is found in advanced countries, and its lowest incidence is found in developing countries.

Distribution of colorectal malignancies indicates that 70% of them are localized in the distal or left large bowel, i.e. between the splenic flexure and the lower rectum.

Most colorectal cancers are believed to arise from pre existing adenomatous polyps via multistep accumulation of genetic faults (the adenoma-carcinoma sequence); the early detection and removal of these adenomas have been shown to reduce both the incidence and mortality of colorectal cancer.

The available modalities of investigation include: fecal occult blood test, double contrast barium enema, and conventional colonoscopy, MSCT has been used to detect and stage primary and recurrent colorectal neoplasms and has been joined by MR imaging, trans-rectal sonography, scintigraphy with monoclonal antibody (MoAb) imaging and Positron Emission Tomography (PET).

CT colonography is a radiologic modality that is being evaluated as a potential new screening tool for colorectal polyps and cancer.

Practical advantages of CT colonography include better patient tolerance, absence of complications, absence of the need for sedation and short duration of the examination.

Multi–detector row CT offers 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.

Technical advantages include the ability to visualize the whole colon, accurate localization of the lesion, ability to visualize the colon proximal to an obstructing lesion, the ease of navigation in both antegrade and retrograde manners to visualize both sides of interhaustral folds and the ability to detect extracolonic findings. Virtual colonoscopy is feasible for detection of polyps and cancers 10 mm and larger in diameter. The sensitivity was 90% for polyps 10 mm and larger, 80.1% for polyps 5-10 mm, 59.1% for polyps smaller than 5 mm in diameter.