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CoRIPS project 130

Interim report - August 2019

A comparative study of MRI and Endo-rectal ultrasound for the assessment of the low-mid rectal lesion.

100 consecutive patients with a low-mid rectal lesion were identified through the radiology information system retrospectively. This single site study was based at a large secondary care centre in the midlands. Each identified patient has a histologically proven rectal lesion. To be eligible for inclusion in the study the patient must have had both MRI and endo-rectal ultrasound assessment of the lesion prior to any neo-adjuvant/adjuvant therapies. The T stage of the lesion for each lesion has been recorded on RIS as per American Joint Committee on Cancer – Colon and Rectum Cancer Staging 7th Edition. The aim of the study is to present a Kappa statistic based on the data for:

- Endo-rectal ultrasound versus histology
- MRI rectum versus histology

This data will be further analysed for a secondary outcome to determine if there is any statistically significant features of lesion characteristics that lend different morphological lesions to an optimal assessment of T stage by either MRI or endo-rectal ultrasound? It is hypothesised that posterior rectal wall lesions are better identified using endo-rectal ultrasound and bulky, mobile and higher lesions are better assessed using MRI.