AB214. The accuracy of magnetic resonance imaging in local staging of rectal cancer post neoadjuvant chemoradiotherapy

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Background: Patients who are diagnosed with rectal cancer routinely undergo neoadjuvant chemoradiotherapy in our institution. A cohort of these patients undergo restaging magnetic resonance imaging (MRI) pelvis after neoadjuvant treatment, in addition to a pre-treatment MRI. This study aimed to compare local MRI staging with post-operative

resection histology report in order to determine the accuracy of pre-operative MRI.

Methods: Analysis of a prospectively updated 3-year database of patients with rectal cancer from 2015 to 2018 was performed. Patients who underwent neoadjuvant chemoradiotherapy and then had restaging MRI rectum were selected. Pre-operative MRI local staging was compared to histology report of total mesorectal excision.

Results: Forty patients were included over the 3-year period. There was a close correlation between MRI and histology in terms of T stage, N stage, mesorectal invasion and vascular invasion.

Conclusions: MRI is a valuable diagnostic modality in the local staging and treatment planning of rectal cancer and demonstrates good correlation with post-operative histology.

Keywords: Magnetic resonance imaging (MRI); staging; rectal cancer

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