

posters

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Radiological assessments for select patients in neoadjuvant setting in rectal cancer: monoinstitutional experience

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Introduction: Neoadjuvant radiochemotherapy (NCRT) reduces the risk of local recurrence in patients (pts) with locally advanced rectal cancer (LARC). The main

issue is the accurate staging before and after NCRT and its predictive role for select responding pts.

Methods: From January 2010 to November 2014, 71 consecutive pts with rectal cancer (stage II-III) received NCRT with capecitabine 825 mg/m² bid concomitant with 45-50 Gy conventional fractionation external beam radiotherapy followed by radical surgery (total mesorectal excision) at 12 weeks. All patients were staged with pelvic magnetic resonance imaging (MRI); 65 of them performed also endoscopic ultrasound (EUS) before and after NCRT.

Results: the mean age of patients was 64 years (range: 36-84). 51% pts had tumor in lower third of rectum (sphincter preservation was performed in 55,5% of pts). Pathological complete response (pCR) was observed in 24% of patients, partial response in 50%, no response in 21% and progression disease in 5%. Median follow-up was 22 months. At this time disease-free-survival was 81,7% and overall survival was 85,9%. Median time for restaging exams was 32 days (11-68) from the end of therapy. In the staging phase (before NCRT) there was concordance between EUS and MRI in 91,3% of cases with regard T stage and 70,9% for N stage; MRI is able to detect lymph node involvement increased by 20% compared to EUS. In the post-treatment phase pelvic MRI predicted pathological T stage in 39,0% versus 41,5% for EUS and in 53,0% versus 66,0% respectively for N stage. For the subgroup of pts with pCR MRI predicted pathological T stage in 23,5% versus 47,0% for EUS and in 50,0% versus 76,5% respectively for N stage.

Conclusion: MRI and EUS showed good performances for staging rectal cancer but nodal staging remains challenging. Both techniques appear to be inadequate in predicting response and especially in predicting the pathologic complete response after NCRT. It is necessary to improve diagnostic tools and develop predictive markers of response in order to be able, in the future, to select pts that may avoid surgery or adjuvant chemotherapy.