

Conclusion: Distant metastasis remains the major issue in the management of LARC. This study demonstrated improvement in pCR, as well as the potential to achieve higher survival rates, including DFS. Waiting for randomized phase III trials long-term follow-up data, OXP should be considered as feasible and valid neo-adjuvant treatment option. The low rate of severe toxicity and the effective benefit on pCR and peri-operative metastasis support this concomitant CHT schedule for LARC.

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Total mesorectal excision vs. local excision following preoperative RT for "early" cT3 rectal cancer

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Purpose or Objective: To compare the oncologic outcome of total mesorectal excision (TME) to local excision (LE) in "early" clinical T3 rectal cancer patients who received preoperative radiation therapy.

Material and Methods: "Early" clinical T3 patients, who underwent preoperative radiation therapy followed by TME or LE at Asan Medical Center between January 2007 and December 2013 were retrospectively analyzed. "Early" clinical T3 was defined as extramural extension, circumferential resection margin negative and lateral lymph node negative in pretreatment magnetic resonance imaging. A one-to-one propensity case-matched analysis was used with covariates of baseline characteristics. Local recurrence free survival (LRFS), disease free survival (DFS), overall survival (OS) were compared between the matched two groups.

Results: A total of 425 patients were identified; 366 underwent TME and 59 underwent LE. The median follow-up period was 47 months. After propensity score-matching, we obtained 55 matched pairs. There were no significant differences in 3-year LRFS (95.8% vs 94.2%, p=0.927), DFS (85.7% vs 90.8%, p=0.473), OS (96.2% vs 100%, p=0.987) between TME and LE groups.

Conclusion: In "early" clinical T3 rectal cancer, local excision could be a feasible alternative to mesorectal excision after preoperative chemoradiation.

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Anal cancer as a second human Papillomavirus-related presentation after cervical dysplasia/neoplasia

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Purpose or Objective: Cervical intraepithelial neoplasia (CIN) and anal squamous cell carcinoma (SCC) are both causally associated with human papilloma virus infection (HPV). Women who have an HPV infection of the cervix are at a higher risk of HPV infection of the anal canal with the same HPV subtype(1). The incidence of HPV infection and related cancers is increasing in developed nations(2). Until the impact of widespread HPV vaccination is manifest, presentation with multiple HPV related malignancies will become a more common clinical scenario. Our objective was to identify the proportion of women with anal cancer who had a history of CIN or invasive cervical cancer (ICC) and discuss the implications for future practice.

Material and Methods: The medical records and histopathology of all consecutive women treated definitively for anal cancer at our centre between January 2004 and July

2015 were reviewed. A case was defined as a woman reporting a history of CIN or ICC treated with either a cone biopsy or hysterectomy. We extracted treatment details of both the anal cancer and CIN or ICC, demographic and outcome data. Women with a previous abnormal pap smear or low grade cervical dysplasia were not included as a case.

Results: Eight cases (25%) were identified; Stage III (63%), I, II, IV (each 12.5%). The women were HIV negative, aged 36-62 years and diagnosed with HPV positive anal SCC 10-40 years after their initial diagnosis. Of the remaining 24 women, Nine had no prior history, Four had a previous abnormal pap smear, one a partial hysterectomy for unknown reason, two a hysterectomy for benign uterine disease and eight no recorded gynaecological history. Seven women had definitive chemoradiotherapy and one had sequential chemotherapy and radiotherapy (Stage IV). All were alive and disease free at follow up.

Conclusion: One quarter of women with anal SCC had a previous history of CIN or ICC. This may be an underestimate as a gynaecological history was missing in 25% of patients. There are several implications for practice: the importance of specifically elucidating a history of HPV-related disease such as warts, CIN or ICC on history; secondly, to have a high index of suspicion when these women present with bowel symptoms; third, that this represents a high risk group of women who may benefit from participation in anal pap screening programs similar to that being investigated in high risk men.

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A correlation between PTV dosimetric criteria and pathological response in rectal cancer patients

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Purpose or Objective: To test the relationship between dosimetric data and pathological response in a series of 52 patients treated with combined pre-operative chemoradiation (CRT) for local advanced rectal cancer..

Material and Methods: We studied 52 consecutive patients treated with pre-operative CRT for locally advanced rectal cancer (T3-4N0M0 or any TN+M0, G1-3). Total dose prescribed was 44 Gy (2 Gy/tx) (Group 1, n = 10) or 45 Gy (1.8 Gy/tx) (Group 2, n = 42), delivered using helical Tomotherapy (HT). A concomitant Capecitabine-based chemotherapy was also delivered. All patients underwent surgery 6 to 8 weeks after the end of CRT. Surgery consisted of low anterior resection (LAR) or abdominoperineal excision (APR), depending on the tumor distance from anal margin. For all patients, we calculated pathological response through difference between TNM clinical staging and TNM pathological staging such as by pathological Dworak tumor regression score (TRG). We tested the relationship between pathological response and planning target volume (PTV) dosimetric criteria in agreement with ICRU 83 and internal guidelines. Selected parameters were: Dmax, Dmin, Dmean, D98, D95, D2, V95, V100, V107, V110 and target volume (cc). Non-parametric statistical analysis (Wilcoxon, U-Mann-Whitney, Kruskal-Wallis tests) was performed using SPSS.21 software (significant level p < 0.05). Planning dosimetric data were extracted from patient archives using VODCA 5.4.0.

Results: Results: A significant reduction in TNM staging was observed post-treatment (p < 0.001 and p < 0.010 for T & N, respectively). Furthermore, 3 patients presented a total remission (5.8%) and 30 remained stable (57.7%). For Group 1, average values and standard deviation of Dmean, Dmin and Dmax (Gy) were 44.5 ± 0.4, 30.4 ± 3.6, and 47.2 ± 0.3, while for Group 2 were 45.1 ± 0.3, 33.1 ± 3.5, and 48.1 ± 0.6. Dose