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POSTER

# **Mature Out-come After Low-dose Chemoradiotherapy Following Local Excision of Early Stage Anal Carcinoma**

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**Background:** Concomitant chemoradiation (CRT) comprising 45–60 Gy of radiation with concomitant Mitomycin C (MMC) and 5Fluorouracil (5FU) is the standard primary treatment for anal cancer. With these regimens the outcome is generally very successful, but high dose radiotherapy regimens imply a substantial degree of acute and late toxicity. Data from Nigro suggests that 30 Gy CRT is an effective treatment and the results of the ACT2 trial that used 30 Gy to treat subclinical disease support the view that low-dose CRT may be a useful option in early stage disease. The present study reports mature outcome data of all patients treated with low-dose chemoradiotherapy for early stage anal carcinoma following local excision during 10 years in a single institution.

**Material and Methods:** Retrospective data were collected from all patients with squamous cell anal carcinomas, who were treated with low-dose CRT after local excision at St. James' Institute of Oncology, Leeds, UK according to an institutional protocol. Treatment consisted of external beam radiotherapy (30 Gy in 15 fractions over 3 weeks) with concurrent chemotherapy (MMC 12 mg/m<sup>2</sup> day 1 and infusional 5-FU 1,000 mg/m<sup>2</sup>/24 h day 1–4). Follow-up was performed according to local guidelines every 3 months for the first year, 6 monthly for years 2–3 and annually for years 4–5.

**Results:** Twenty eight patients underwent local excision for squamous cell carcinoma of the anus during the period of June 2000–December 2010. The indication for post-operative CRT was involved margins ≤1 mm n = 12; close margins >1 mm–5 mm n = 7; margins >5 mm with initial tumour stage T2 n = 5; and macroscopic complete local excision but small volume disease present at time of CRT n = 4.

The median treatment time was 18 days (Range 9–51), and 27/28 patients received the full dose of 30 Gy. The median follow up was 56 months (range 1–118). At the time of analysis 24 patients (86%) were alive without evidence of disease. Two patients had died from anal cancer (7%), and two from other causes. Two local failures were recorded 6 and 8 months post CRT (local only n = 1; local and inguinal n = 1; both not suitable for salvage surgery).

**Conclusion:** In this small study, low-dose CRT using 30 Gy and concomitant MMC and 5FU is associated with very low failure rates following local excision of early stage anal cancer. This approach warrants wider evaluation with the aim of reducing acute and late toxicity.

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# **Long-term Experience With Neoadjuvant Concurrent Chemoradiotherapy for Locally Advanced Rectal Cancer Using Oral UFT and Leucovorin**

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**Purpose:** To evaluate experience of neoadjuvant concurrent chemoradiotherapy (NCCRT) given to patients (pts) with locally advanced adenocarcinoma of rectum (LAAR) oral UFT and leucovorin (UFT-Leu).

**Patients and Methods:** Twenty-six pts (16 males and 10 females) received NCCRT using UFT-Leu for LAAR. The median age was 63 years (range 36–78). Staging procedures included trans-rectal ultrasound and whole body CT-scan in all pts. Radiotherapy (RT) was planned to 44 Gy (2 Gyx5) to pelvis with completion to rectal tumour and involved lymph nodes to 50 Gy. Chemotherapy (CTR) consisted of oral UFT 240 mg/m<sup>2</sup>/day and leucovorin 60 mg/m<sup>2</sup>/day, excluding RT breaks.

**Results:** Twenty four pts (92%) completed chemo-radiotherapy as planned. Median relative dose intensity of UFT was 0.93. Grade III-IV toxicity rates were as follows: diarrhoea – 10%, mucositis – 9%, anemia – 4%, and skin toxicity – 2%. All toxicity events were well manageable and did not present threat to pts life. Twenty five pts were operated, 19 of them (77%) underwent anterior resection and 6 pts (23%) underwent abdomino-perineal resection. Surgery complicated by anastomotic leakage in 1 pts and wound infection in 5 pts. Pathologic study demonstrated complete response in 2 (8%) pts and tumour down-staging in 14 (56%) pts. Seventeen patients got adjuvant CTR. Five-year local control and freedom from distant metastases rates

were 88% and 68% respectively. Five-year relapse free and overall survival rates were 63% and 71% respectively.

**Conclusions:** To our experience, NCCRT containing UFT-Leu is safe and effective therapy for pts with LAAR.

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# **Chemoradiotherapy With or Without Surgery for Locally Recurrent Rectal Cancer**

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**Background:** To assess the clinical outcome of chemoradiotherapy with or without surgery for locally recurrent rectal cancer (LRRC) and to find useful and significant prognostic factors for a clinical situation.

**Methods:** Between January 2001 and February 2009, 67 LRRC patients, who entered into concurrent chemoradiotherapy with or without surgery, were reviewed retrospectively. Of the 67 patients, 45 were treated with chemoradiotherapy plus surgery, and the remaining 22 were treated with chemoradiotherapy alone. The mean radiation doses (biologically equivalent dose in 2-Gy fractions) were 54.6 Gy and 66.5 Gy for the chemoradiotherapy with and without surgery groups, respectively.

**Results:** The median survival duration of all patients was 59 months. Five-year overall (OS), relapse-free (RFS), locoregional relapse-free (LRFS), and distant metastasis-free survival (DMFS) were 48.9%, 31.6%, 66.4%, and 40.6%, respectively. A multivariate analysis demonstrated that the presence of symptoms was an independent prognostic factor influencing OS, RFS, LRFS, and DMFS. No statistically significant difference was found in OS (p = 0.181), RFS (p = 0.113), LRFS (p = 0.379), or DMFS (p = 0.335) when comparing clinical outcomes between the chemoradiotherapy with and without surgery groups.

**Conclusions:** Chemoradiotherapy with or without surgery could be a potential option for an LRRC cure, and the symptoms related to LRRC were a significant prognostic factor predicting poor clinical outcome. The chemoradiotherapy scheme for LRRC patients should be adjusted to the possibility of resectability and risk of local failure to focus on local control.

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# **The Long Term Results of the Liver First Approach in Patients With Locally Advanced Rectal Cancer and Synchronous Liver Metastases**

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**Background:** The liver "first approach" for locally advanced rectal cancer and synchronous liver metastases has previously been scarcely described. There are no reports on long-term outcome in this population. In this study we describe the long term survival and management of the rectal primary of this patient population in case of unresectable metastases.

**Material and Methods:** Patients were included from May 2003 till March 2009. Last follow up was done at March 2011. Patients with locally advanced rectal cancer and synchronous liver metastases were primarily treated for their liver metastases. If successful, patients underwent surgery with adequate neoadjuvant chemoradiotherapy for the rectal tumour.

**Results:** A total of 45 patients with locally advanced rectal cancer and synchronous liver metastases were included. The study group consisted of 34 men and 11 women with a median age of 61 (39–78) years. Median size of metastases was 2.75 (1–13), number of metastases 4 (1–13) and median CEA 41 (1–5315) ug/l. The majority (53%) had bilobar hepatic metastases and extra hepatic disease was found in 9%. Forty-four (98%) patients received neoadjuvant chemotherapy. Four (9%) patients had a complete response of the liver metastases and 8 (18%) patients had a complete response of the primary tumour. Thirty-two (71%) patients completed the "liver first" protocol. Eleven patients were not resected for the primary tumour due to incurable metastases. Five year survival of patients with intention to treat (n = 45) was 44% and for those patients who completed the protocol (n = 32) the 5 year survival was 65%.

**Conclusion:** When applying the liver first approach, the majority of these patients can undergo curative resections of both metastatic and primary disease (71%). This protocol avoids useless rectal surgery in patients with incurable metastatic disease. Long term survival can be achieved with 5 year survival rates of 65% in this population who completed the protocol.