Conclusions. Tumour regression grade has a significant impact on survival outcomes, which were lower in patients with poor down-staging after neoadjuvant treatment. The use of a standardized system to evaluate tumour response in rectal cancer can allow for comparisons between different institutions and can identify patients at worse prognosis to be treated with adjuvant therapy. However, these results need further analysis with prospective studies.

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Eight-year experience in the management of anal carcinoma with radiatiotherapy

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Background. Squamous cell cancer of the anus is an uncommon malignancy. The idea of organ preservation emerged following the discovery of a high rates of complete response to combined chemoradiation prior to abdominal–perineal resection. Radiotherapy, with concomitant chemotherapy for advanced tumours, is now the standard first-line treatment for anal carcinoma.
Aim. The aim of this study was to retrospectively evaluate clinical characteristics, local control, and acute toxicity of patients with anal canal carcinoma treated with radiation therapy. Methods: From 2004 to 2011, 16 patients with good performance status (Karnofsky Performance status ≥70) were treated with radiation therapy at a single institution. The median age was 64 years (range, 33–82 years). The TNM classification was as follows: 2 stage I, 4 stage II, 4 stage III, 2 unknown and 4 recurrences. Patients received either radiochemotherapy ($N = 12$) or radiotherapy alone ($N = 6$) consisting of a median delivered dose of 50 Gy. Toxicity was evaluated using the Radiation Therapy Oncology Group scale.
Results. With a median follow-up of 16 months (range, 23–47), there were 6 relapses (2 both regional and distant and 4 both local-regional and distant). The main symptom at diagnosis was pain in the anal area ($N = 8$) followed by rectal bleeding ($N = 6$). The most common acute grade 3 complication was radiation mucositis, which occurred in 6 cases (38%). In addition, five patients experienced grade 2 acute proctitis and 5 grade 3 after radiation therapy. Only 3 patients showed grade 3 acute dermatitis being grade 2 in 7 patients.
Conclusions. Radiation therapy appears to be an effective and well tolerated treatment for anal carcinoma offering both high local tumor control and anal sphincter preservation.
Keywords. Anal carcinoma; Brachytherapy; Prognostic factor; Toxicity.

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Experience with IMRT and integrated boost in anal canal carcinoma

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Introduction. The current treatment of anal canal cancer is concurrent radiotherapy and chemotherapy. Our new goal is to achieve better local control rates without increasing secondary effects. The IMRT is a new path to follow to achieve this goal. OBJECTIVE: To evaluate the outcomes and toxicity of patients with anal canal carcinoma treated with IMRT and simultaneous integrated boost.
Method and materials. 9 patients with biopsy proved squamous cell carcinoma treated with IMRT with simultaneous integrated boost were analyzed. Six of them were simulated with PET-CT, and all of them received concomitant chemotherapy. Treatment volumes were macroscopic tumor and suspected malignant nodes as GTV, pelvic lymph nodes at risk including inguinal regions as CTV; PTVs was created expanding CTVs by 0.5 cm. Dose schedule was 50.4 Gy at 1.8 Gy/day to tumor and lymph nodes at risk and 60.48 Gy in an integrated boost of 2.16 Gy to visible tumor and malignant suspected lymph nodes. Treatment was completed in 28 fractions. Megavoltage ConeBeam CT IGRT was performed in all patient.
Results. The mean age was 62 years (43–87). All patients received concomitant chemotherapy with mitomycin C and 5FU, except an elderly patient who was treated with Xeloda Two patients had acute genitourinary toxicity (ctcae v3) GII. Six patients had grade II skin toxicity, no toxicity greater than G-III was found. One patient developed G-III proctitis two years after treatment completion and were treated with argon laser. One patient had a local recurrence one year after treatment and was surgically rescued. Histopathological analysis showed the presence of adenocarcinoma instead of the initially proved squamous histology.
Conclusion. IMRT is well tolerated in patients with anal cancer and the use of integrated boost, do not seems to increase the acute or chronic toxicity compared to historical series.

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