

Results. The response was evaluated depending on the presence of biochemical failure (PSA level higher than nadir plus 2) after a follow-up between 50 and 78 months. 14 patients (8.9%) presented biochemical failure during that period, 11 patients with brachytherapy only and 3 patients with combined treatment. In the analysis of D90/30 in failure cases: 7 patients above 95%, 6 patients below 95% and is not on a patient. Biopsy was made in 6 patients with biochemical failure, five of them being negative.

Conclusions. Our results correlate with the general pattern of biochemical failure between 5 and 12% depending on the characteristics of the stage. Analysis-D90/30 in failure cases: 7 are above 95%, 6 below and 1 has no data.

<http://dx.doi.org/10.1016/j.rpor.2013.03.651>

Biochemical control of prostate cancer treated with brachytherapy (125I)

E. Rivin¹, S. García², A. Otero³, A. Béjar³, M. Rodríguez³, A. Palacios³

¹ Institut Gustave Roussy, Villejuif, Francia, Oncología Radioterápica, Spain

² Complejo Hospitalario Reina Sofía, Oncología Radioterápica, Spain

³ Complejo Hospitalario Reina Sofía, Oncología Radioterápica, Spain



Introduction. Recently, Brachytherapy for prostate cancer (PC) has been considered first line treatment in selected patients with localized PC.

Objectives. Analysis of characteristics and biochemical control of patients treated with 125I brachytherapy since its introduction in our department.

Methods. Between July 2007 and January 2013, 144 implants have been performed. One-hundred patients were analyzed retrospectively (minimum follow-up: 1 year) by age, neoadjuvant hormonal therapy, PSA, Gleason score, T stage, risk group, number and time to nadir and biochemical control (Phoenix criteria). We performed a descriptive study calculating mean and standard deviation for quantitative variables and absolute frequencies and percentages for qualitative variables. We performed a survival analysis (Kaplan-Meier method) to calculate biochemical control.

Results. The mean age was 64.6 ± 6.6 years (49–75). 17% had started androgen deprivation therapy. Mean PSA was 5.8 ± 1.7 ng/ml (2.4–9.7). Gleason score 6 was most frequent (93%), followed by 5 (4%) and 7 (2%). Distribution by stages: T1c (96%), followed T2a (4%). Risk group: low (98%), intermediate (2%). Mean nadir was 0.74 ± 0.93 ng/ml (0.0 to 5.8) and median time to reach it was 22.2 ± 15.3 months (3.7–57). Six patients had biochemical recurrence. With post-implant dosimetry no relation was found between the dose received by 90% of the target volume (D90) and biochemical recurrence. With a median follow up of 36.4 months (12–64), biochemical control at 2 and 4 years was 97.3% and 86.2%, respectively.

Conclusions. 125I brachytherapy as radical treatment in selected patients with localized PC achieves optimal results in terms of biochemical control. These results agree with the literature.

<http://dx.doi.org/10.1016/j.rpor.2013.03.652>

Biochemical recurrence-free survival after prostate cancer

L. Alled Comín, C. Laria Font, J. Pérez Pausin, R. Escó Barón, C. Velilla Millán, M. López Mata

Hospital Clínico Universitario Lozano Blesa, Oncología Radioterápica, Spain



We present the results of patients with localized prostate cancer treatment with radical radiotherapy remains our objective to analyze the biochemical recurrence-free survival. Between 2004 and 2007, 81 patients with prostate adenocarcinoma (28.4% intermediate risk and high risk, 67.9%) were treated with external beam radiation dose of 78 Gy/2 Gy per fraction, all of them were followed up minimum of five years. Hormonal therapy was associated in 87.7% of patients. All patients were diagnosed with prostate cancer and were classified according to the Gleason score, tumor size an initial PSA. Mean age 65.39 years (range 47–75), median PSA at diagnosis 25.6 range (4–210), T1 (3.7), T2a-b (42%) T2c (34.5%), T3 (12.3%), T2 (2.5%), Gleason minor or equal 6 (49.4%), Gleason 7 (19.8%), Gleason major of 7 (28.4%), 2.5% unknown. The follow-up assessment after treatment was performed at intervals of 3–6 months, the minimum followup was 12 months and median of 61 months with a range between 10 and 99 months. All events were determined from the start of radiotherapy until relapse. The results of biochemical recurrence were 12.3% and 86.4% if not there is biochemical recurrence, with a media time to failure of 56.16 moths and a failure-free survival (SLFB) range of 19–95 months. Average 77.58 months and median 64.19 months. Tolerance of radiotherapy was acceptable. We conclude that radiotherapy is a safe and effective treatment for patients with localized prostate cancer.

<http://dx.doi.org/10.1016/j.rpor.2013.03.653>

Evaluating the effectiveness of MRI in the initial therapeutic strategy in prostate cancer

M. Pérez Martín, R. del Castillo Acuña

Hospital Punta de Europa, Servicio de Oncología Radioterápica, Spain



Evaluation of local disease extend is typically accomplished with the combination of digital rectal examination (DRE) and transectal ultrasound at the time of biopsy. Magnetic resonance imaging (MRI) is widely available in our department, and therefore we usually apply it in the initial evaluation of men with newly diagnosed prostate cancer. The aim of this descriptive study is to