ORCHIECTOMY VERSUS FLUTAMIDE IN THE TREATMENT FOR METASTATIC PROSTATE CANCER

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Introduction
Andenocarcinoma of the prostate is the most commonly diagnosed malignant neoplasm in the United States of America. Currently, there is no curative treatment for patients with metastatic prostate cancer, who have a progressive and eventually fatal clinical course. The median survival of cohorts of patients with metastatic disease who have entered large-scale, prospective, randomized trials during the past three decades has been relatively stable (range, 24 to 36 months). Deprivation has substantial palliative effects, but virtually in all patients the tumor eventually progresses to an androgen-insensitive state in which no treatment can prolong survival. Suppression of androgens of testicular origin is the focus of androgen-deprivation treatment. This can be accomplished by surgical castration or by medical suppression of testicular function with synthetic analogues of gonadotropin-releasing hormone. However, after ablation of the tests by either means, the incorporation of androgens into the cell nucleus continues, as a result of undiminished production of androgens by the adrenal glands. The effects of these androgens can be counteracted by adding an antiandrogen drug such as flutamide to testicular removal. This form of combined androgen blockade enhances antitumor effects and reduces the size of normal prostate glands and seminal vesicles in animal models. Since the early 1980s, numerous randomized clinical trials have evaluated the efficacy of combined androgen blockade. Three large trials, including our previous trial, suggested that combined androgen blockade conferred an important survival advantage.
Methods
A systematic review was carried out in the MEDLINE database using the following search strategy: (orchiectomy OR flutamide) AND metastatic prostate cancer. The filter "Therapy/Narrow" was used through the Clinical Queries interface. The authors analyzed the studies independently by title and the summary of each recovered articles and selected those that met the inclusion criteria: randomized clinical assay comparing the use of orchiectomy with flutamide drug that had been written in Portuguese, English or Spanish. After this initial selection process, the authors read the full text of the eligible articles and evaluated them critically. Only studies with a score > 3 according to the criteria established by Jadad et al. were included in the data analysis. To evaluate effectiveness, we used the differences in mean time until crisis resolution between the groups and the decrease in the mean pain score according to the Visual Analog Scale (VAS). The measure used was the absolute risk reduction (ARR) with the corresponding 95% confidence interval (95% CI) and the number necessary to treat (NNT). The t-test was used to analyze the continuous variables (for difference of means), with the OpenEpi online tool and the Chi-square test was used to analyze dichotomous variables.

Results
The literature review was finished on November 10, 2011. A total of 04 articles was found, of which only three met the inclusion criteria. After careful reading and analysis of these three eligible articles, one was excluded for having losses to follow-up > 20%. The only eligible article selected were the study by Eisenberger et al., Boccon-Gibod et al. and Labrie et al. which had a score of 4 according to Jadad et al. The data of that study demonstrated there was no significant difference in resolution time of vaso-occlusive crisis between the two groups. The study p-value for the differences in medians was 0.87. The study did not disclose the data on the time difference regarding crisis resolution as means and standard deviations, whereas these data are usually expressed, but as medians with 95% CI, of which upper and lower limits were not equidistant from the median. Therefore, the authors calculated the one-sided p value in two different ways: using the upper limits and the lower limits of the 95% CI. The values obtained were 0.70 and 0.40, respectively.

Evidence synthesis
The use of Flutamide for the treatment of orchiectomy does not demonstrate any significant differences regarding benefits or damages, when compared to the conventional treatment.
References


