Exploring the patient's perspective of value with SBRT, IMRT, or HDR brachytherapy for localized prostate cancer

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Abstract

Objectives: When exploring value between equally curative treatment options, the patient experience is essential. We evaluated the aspects of care patients found most valuable and compared the patient’s perspective of their overall treatment experience between three modern radiation therapy modalities for localized prostate cancer (PCa).

Methods: A total of 322 consecutive patients treated between 2008-14, with low- or favorable-intermediate risk PCa were surveyed. Patients received SBRT (n=122), IMRT (n=85) or HDR brachytherapy (HDR) (n=115) and had 1-year minimum follow-up. No patient received ADT. Patients were mailed a questionnaire exploring their treatment experience and value from their perspective. Patients were asked to rank the top three of the following factors based on how valuable they each were in their cancer care. These factors included the expertise of their treating physician, their relationship with the treating physician, their relationship with the therapists and nurses, the technology of the treatment equipment, the convenience of treatment, the expertise of their physician, the affordability of their treatment and the knowledge they gained about their cancer and treatment. Baseline data included psychosocial demographics, disease characteristics, and comorbidities. ANOVA, Chi-square and the Wilcoxon rank tests were used for comparisons.

Results: The overall response rate was 83% (n=266; SBRT=103, IMRT=72, HDR=91). The median patient age was 67 years, median iPSA was 5.73, 81% of patients had T1c disease and 58% of patients had Gleason (3+4) disease. The median time from completion of treatment to time of the survey was 45.7 months among all patients. Among SBRT patients, 53% of patients ranked the expertise of their physician as the most valuable aspect of their care followed by 18% who selected their relationship with the treating physician and 14% who selected the convenience and ease of treatment. Among IMRT patients, 39% of patients selected the expertise of their physician as the most valuable aspect of care followed by 38% who selected their relationship with the treating physician and 14% who selected the convenience and ease of treatment. Among IMRT patients, 39% of patient selected the expertise of their physician as the most valuable aspect of care followed by 38% who selected their relationship with their physician and 11% who selected the technology of the treatment equipment. Among HDR patients, 52% selected the expertise of their physician, followed by 26% who selected their relationship with their physician and 11% who selected the technology of the treatment equipment as the most valuable part of their care. The distribution of these top rankings were
statistically different between these cohorts (p=0.02). When asked to compare their actual overall treatment experience to their original expectations, 94% (n=97) of SBRT patients reported their actual experience to be better than or as expected compared to 93% (n=67) of IMRT patients and 83% (n=75) of HDR patients (p=0.02). Additionally, 1% (n=1) of SBRT patients reported their overall treatment experience to be significantly worse than expected, compared to 9% (n=8) of HDR patients and 3% (n=2) of IMRT patients (p=0.02).

Conclusions: Our data shows differences in the patient’s perspective of value between SBRT, IMRT, and HDR brachytherapy in the treatment of localized PCa. We also found patients treated with SBRT to most favorably reflect on their actual overall treatment experience compared to their original expectations.