Comparison of Health-Related Quality of Life (HRQOL) After Prostate Cancer Treatment

Introduction and Objective: To compare the health-related quality of life (HRQOL) in prostate cancer patients underwent three different treatment options.

Materials and Methods: Between July 2005 and April 2008, a total of 461 patients with localized prostate cancer, without receiving adjuvant hormonal therapy, underwent retropubic radical prostatectomy (RRP; n=101), brachytherapy (BT; n=323) and external beam radiotherapy (EBRT; n=23) at single institution. The Expanded Prostate Cancer Index Composite (EPIC) was used to investigate HRQOL (urinary, bowel, sexual and hormonal domains for function and bother of those patients). In assessments of sexual and hormonal domains, patients who received neo-adjuvant hormonal therapy were excluded.

Results: The median age of the EBRT group was 74 (range 58-83) years old. EBRT was performed for rather older patients compared with RRP (median age 67, range 56-76 years old) or BT (median age 67, range 38-84 years old). Low risk cases were most commonly treated by BT, intermediate risk by RRP and high risk by EBRT. Urinary incontinence and sexual function scores in the RRP group gradually improved after operation, although they were significantly worse compared with BT and EBRT groups even after 3 years. The urinary irritative/obstructive score in the BT group was worse than other two groups within 3-6 months, but it became equal in 12 months. Bowel function and bother scores in the EBRT group deteriorated after the treatment and showed significant difference compared with other two groups at 3 years. The hormonal function and bother scores were similar in all groups.

Conclusion: This study revealed that BT can generally provide better HRQOL after prostate cancer treatment compared with RRP or EBRT.