



# Quality of life comparison of radical prostatectomy and interstitial brachytherapy in the treatment of clinically localized prostate cancer

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Interstitial brachytherapy (BT) is increasingly being used as a potentially curative treatment for localized prostate cancer. This is due in great part to its perceived advantages in quality of life when compared with radical prostatectomy. However, despite such assumptions, there is currently no data comparing the impact of this technique on quality of life with that of radical prostatectomy. We therefore sought to describe the quality of life in patients with localized prostate cancer treated with either radical prostatectomy, interstitial brachytherapy or a combined therapy of interstitial brachytherapy and external beam radiation (BTC).

## Method

In January 1998, all patients treated for localized prostate cancer between January 1997 and January 1998 by either radical retropubic prostatectomy or interstitial Pd103 brachytherapy were mailed a questionnaire comparing the validated FACT-G instrument.

Questionnaire results were input into a database and compared according to treatment. We evaluated the relationship of the various FACT-G subscales with the treatment group. Analysis of co-variance methods were used to compare treatment mean scores after adjusting for the time since procedure. Differences in treatment level means were penalized for multiple comparisons.

## Results

A total of 147 (79%) of the 185 interstitial brachytherapy and 40 of the 55 (73%) radical prostatectomy patients responded to the questionnaire. Of the interstitial brachytherapy patients, 87 were treated with Pd103 (BTM) and 60 received a Pd103 implant and external beam

radiotherapy (BTC). All interstitial brachytherapy patients had hormonal treatments (flutamide plus finasteride in BTM, and flutamide plus leuprolid in BTC) for 8 months beginning 2 months before radiotherapy. Total FACT score (FACT) and the physical well-being (PWB), social/family well-being (SFWB), emotional well-being (EWB) and functional well-being (FWB) subscales were obtained in accordance with the FACT handbook. The scores were analysed with respect to procedure type and time from initiation of treatment. At the time points from 1 to 18 months post-treatment, radical prostatectomy patients consistently had higher mean scores in all subscales except EWB, where all treatment groups were similar.

## Conclusion

These data indicate a trend for increased quality of life in radical prostatectomy patients compared with BTM and BTC. While initially having a more invasive procedure, patients who underwent radical prostatectomy appear to have a better quality of life compared with those who underwent interstitial brachytherapy. The consistency and magnitude of these trends require further study.

Table 1

RP	Mean (s.d.)	BTM	BTC
85.1 (11.7)	FACT	81.7 (11.8)	77.9 (12.1) <sup>a</sup>
25.2 (3.0)	PWB	23.8 (3.7)	22.4 (4.4) <sup>b</sup>
16.2 (3.7)	SFWB	15.5 (5.0)	14.8 (4.5)
21.0 (3.5)	EWB	21.1 (2.7)	20.5 (3.4)
22.7 (5.4)	FWB	21.8 (5.8)	20.3 (5.6)

<sup>a</sup>Difference from RP ( $P = 0.07$ ). <sup>b</sup>Difference from RP ( $P = 0.01$ ).