
The Human Cost of Prostate Cancer: Health - Related Quality of Life

HS 214

February 10, 2003

Health - related quality of life

2 goals for February 10, 2003

- Primer on measurement
- Lessons from the prostate cancer literature

Outcomes of care

- Mortality
- Morbidity and complications
- “Objective” clinical variables (PSA)
- Patient - centered outcomes
 - » Health - related quality of life (HRQOL)

Health - related quality of life

WHO definition of health (1948)

Health is not merely the absence of disease, but a state of complete physical, emotional, and social well-being

Purposes of Prostate Cancer Treatment

Maximize

- Quantity of life “length”
- Quality of Life “width”

Health - related quality of life

For patients, quality of life outcomes constitute . . .

The human Cost of prostate cancer

HRQOL Research Objectives

- To assess treatment efficacy, including subjective morbidity
- To help determine whether goals of treatment have been met
- To inform medical decision making
- To provide the defining issue if treatments are otherwise equivalent

HRQOL Measurement

- Surveys Instruments
- Questions Items
- Scales Domains
- Scoring 0 - 100

- Psychometric properties
 - » Reliability
 - » Validity

HRQOL Measurement in Prostate Cancer

- General domains
 - » Physical function
 - » Mental health
 - » Social interactions
 - » Role performance
- Disease - specific domains
 - » Worry about recurrence
 - » Appetite, Weight loss, etc
 - » Fatigue
 - » Urinary, Sexual, Bowel

FUNCTION vs BOTHER

HRQOL Measurement in Prostate Cancer

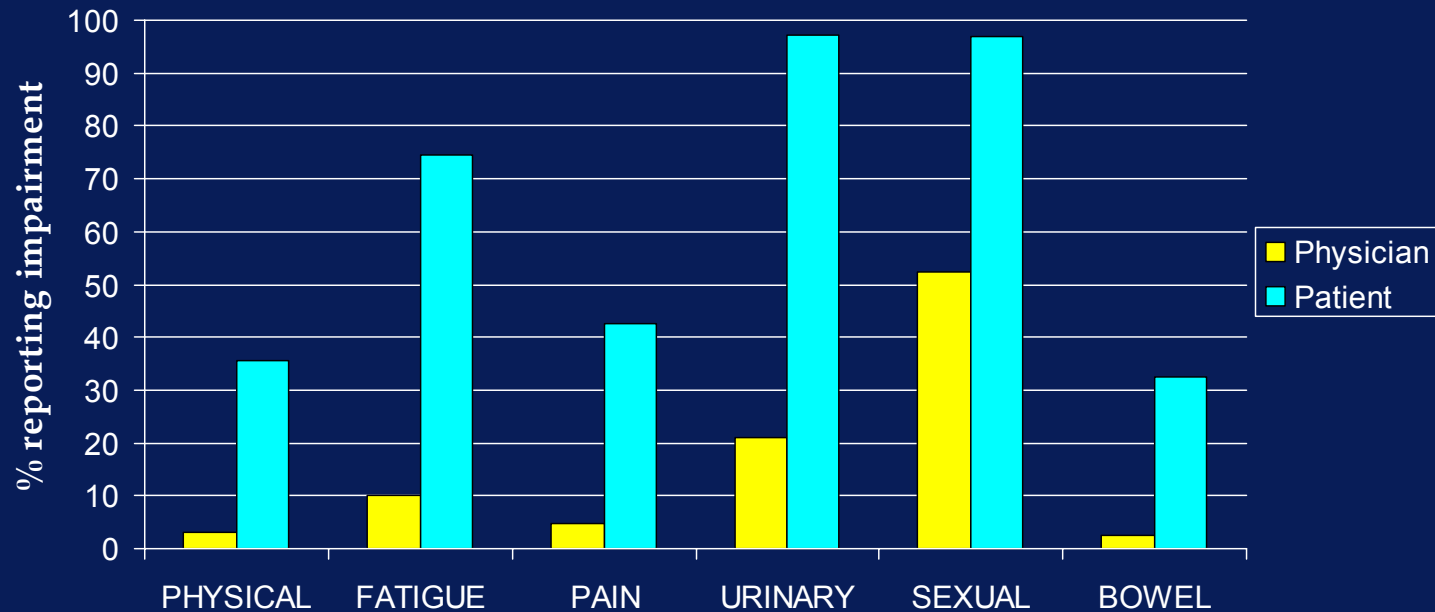
- Measure HRQOL at baseline
- Collect HRQOL data longitudinally
- Assess return to baseline
- Use validated measures
- Use general & disease - specific domains
- Collect data with written, mailed surveys
- Rely on patient self - assessment

HRQOL perspective

Physician vs Patient perception of QOL impairment

n=2,252

p<0.0001



HRQOL Instruments in Prostate Cancer

RAND SF-36

- 8 multi - item scales (scored 0 - 100)
 - Physical function Mental health
 - Role - physical Role - emotional
 - Bodily pain Social function
 - General health Vitality
- Reliable and valid in Prostate Ca populations
- Gold standard general HRQOL measure

HRQOL Instruments for Prostate Cancer

- **UCLA Prostate Cancer Index**
 - Litwin et al, *JAMA* 1995
 - Lubeck et al, *Qual Life Res* 1997
 - Krongrad et al, *J Urol* 1997
 - Litwin et al, *Med Care* 1998
 - Litwin et al, *Am J Clin Oncol* 1998
 - Bacon et al, *J Urol* 2001
- **FACT - P**
 - Esper et al, *Urology* 1997
- **EORTC QLQ - C30 Prostate Module**
 - Borghede et al, *Qual Life Res* 1996
- **EPIC**
 - Sanda et al, *Urology* 2000

UCLA Prostate Cancer Index

- 20 items, written, self-administered
- 6 Scales (scored 0 - 100)
 - Urinary function and bother
 - Sexual function and bother
 - Bowel function and bother
- Used in conjunction with SF - 36
- Based on focus groups and pilot testing
- Highly reliable and valid in early stage patients and in normal older men
- Versions in Dutch, Spanish, French, Japanese

The Human Cost of Prostate Cancer

Radical Prostatectomy vs XRT

Harvard cohort

n = RP 106, XRT 129

Prospective cohort

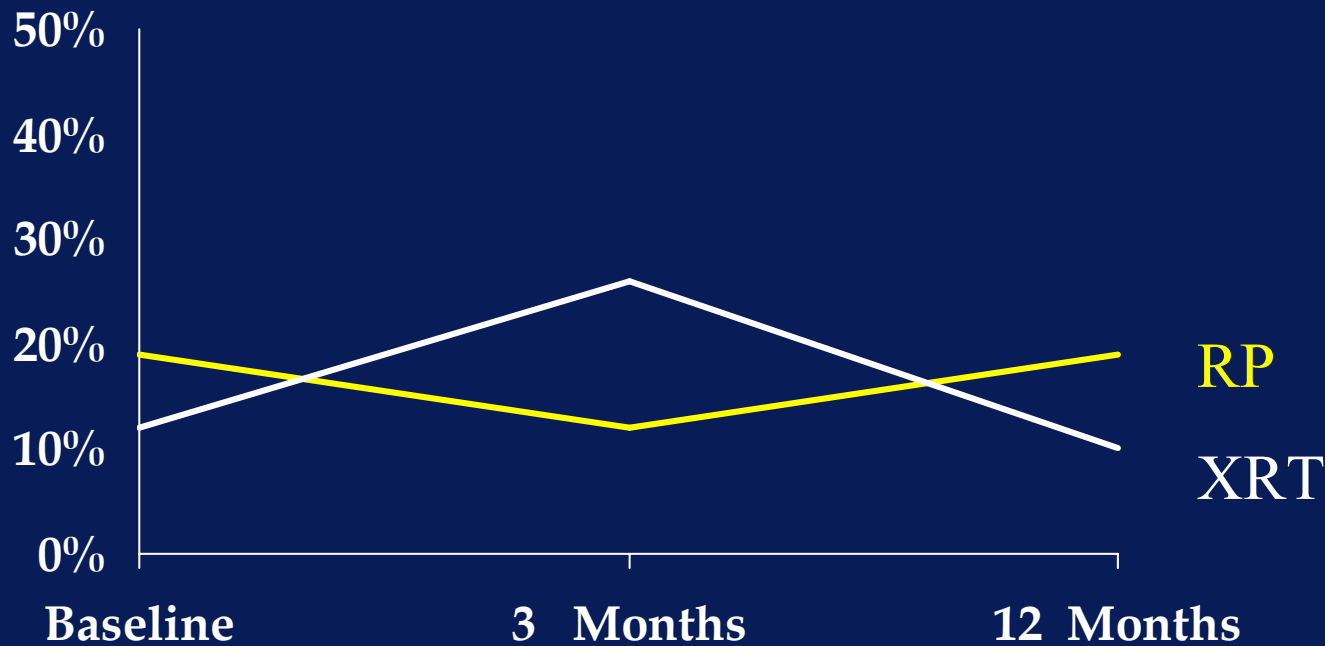
Validated, established QOL instruments

Baseline, 3 mo, 12 mo

The Human Cost of Prostate Cancer

Radical Prostatectomy vs XRT

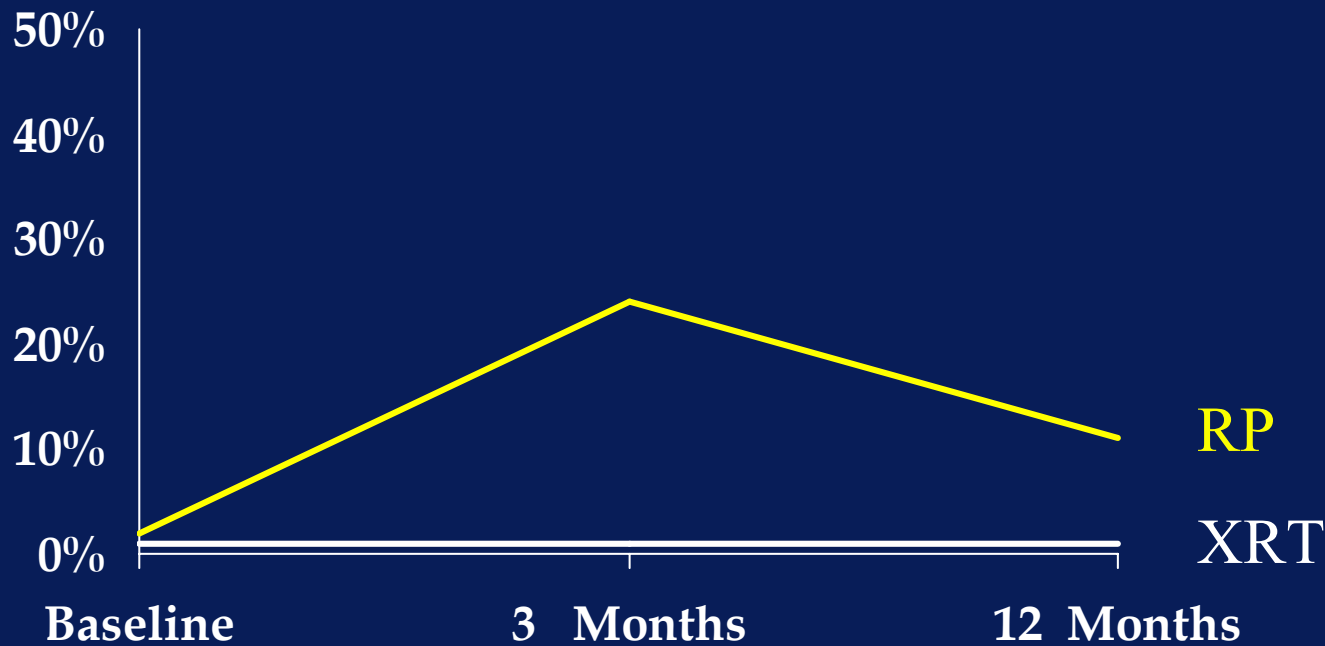
Urinary frequency (>9x/day)



The Human Cost of Prostate Cancer

Radical Prostatectomy vs XRT

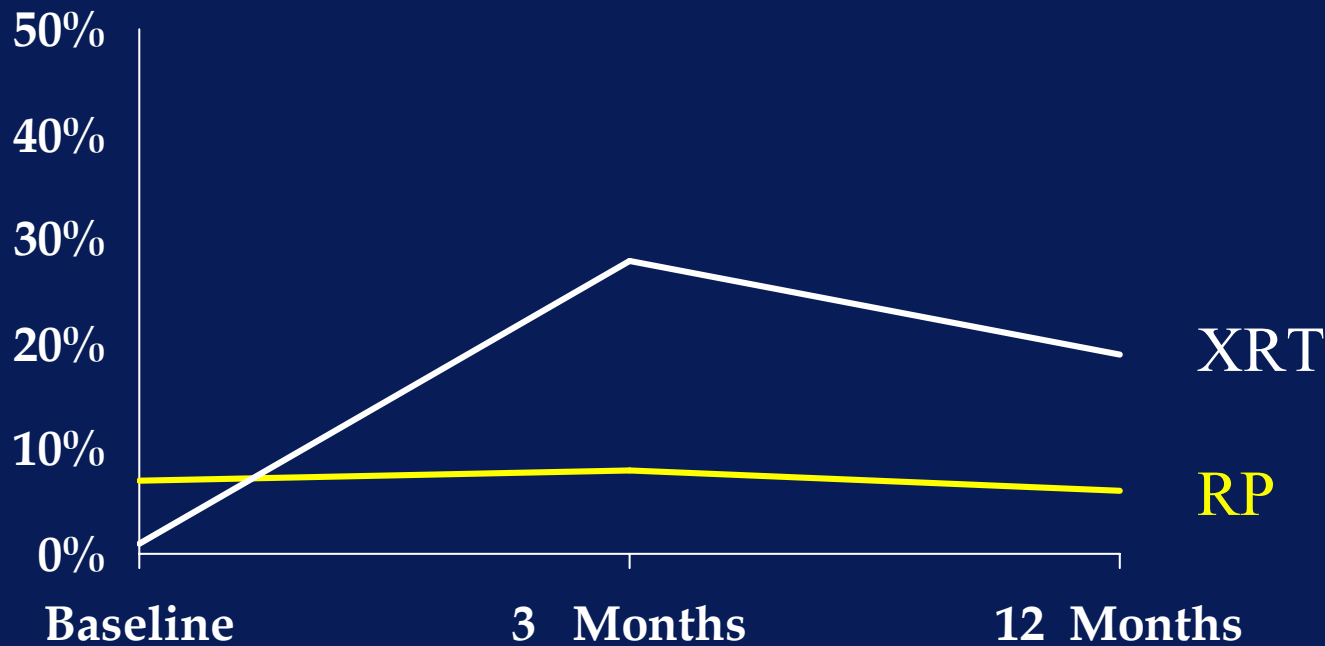
Leaking or Dribbling



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Radical Prostatectomy vs XRT

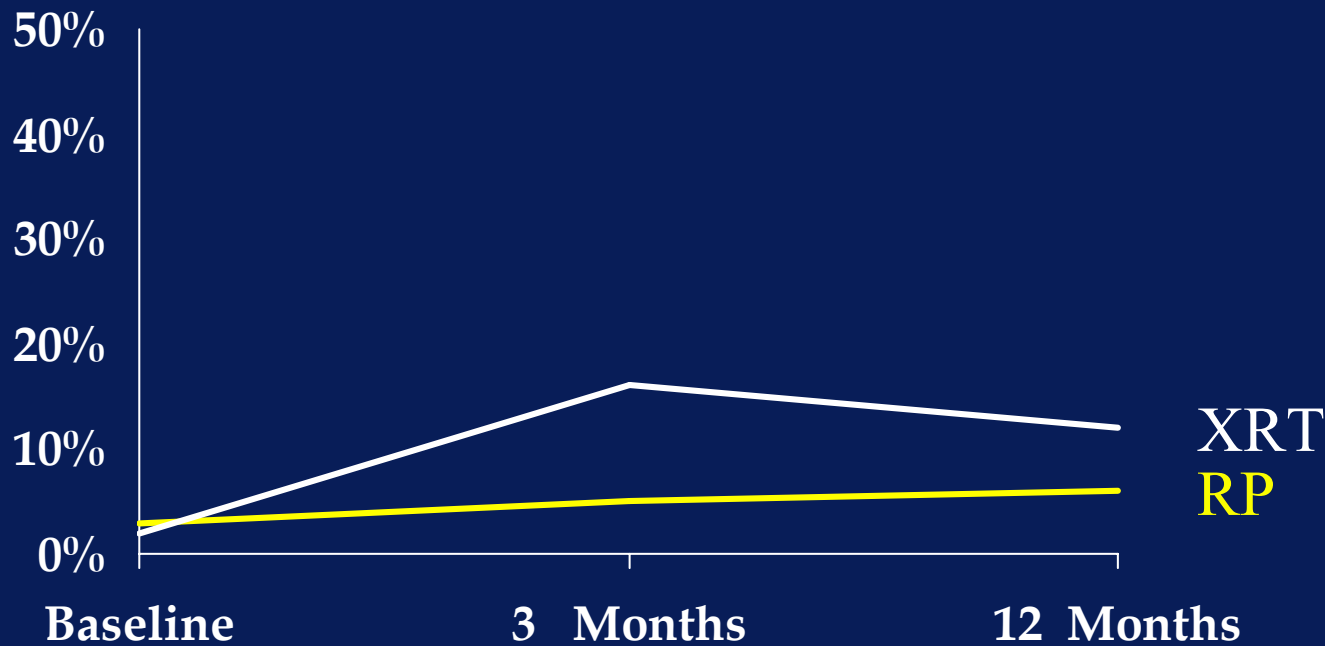
Rectal Urgency



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Radical Prostatectomy vs XRT

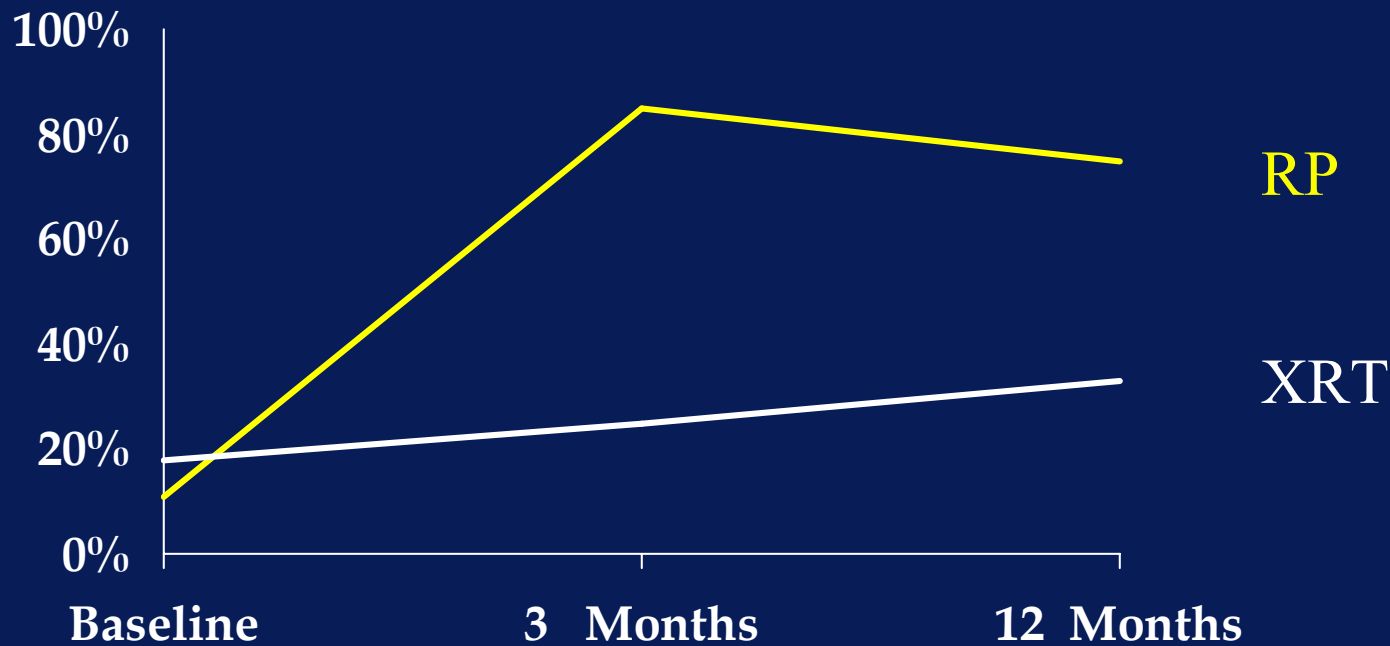
Diarrhea



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Radical Prostatectomy vs XRT

No Erections



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Radical Prostatectomy vs XRT

Sexual Function

Prospective CaPSURE cohort of > 5000 men

n = 240 (RP & XRT)

UCLA - PCI

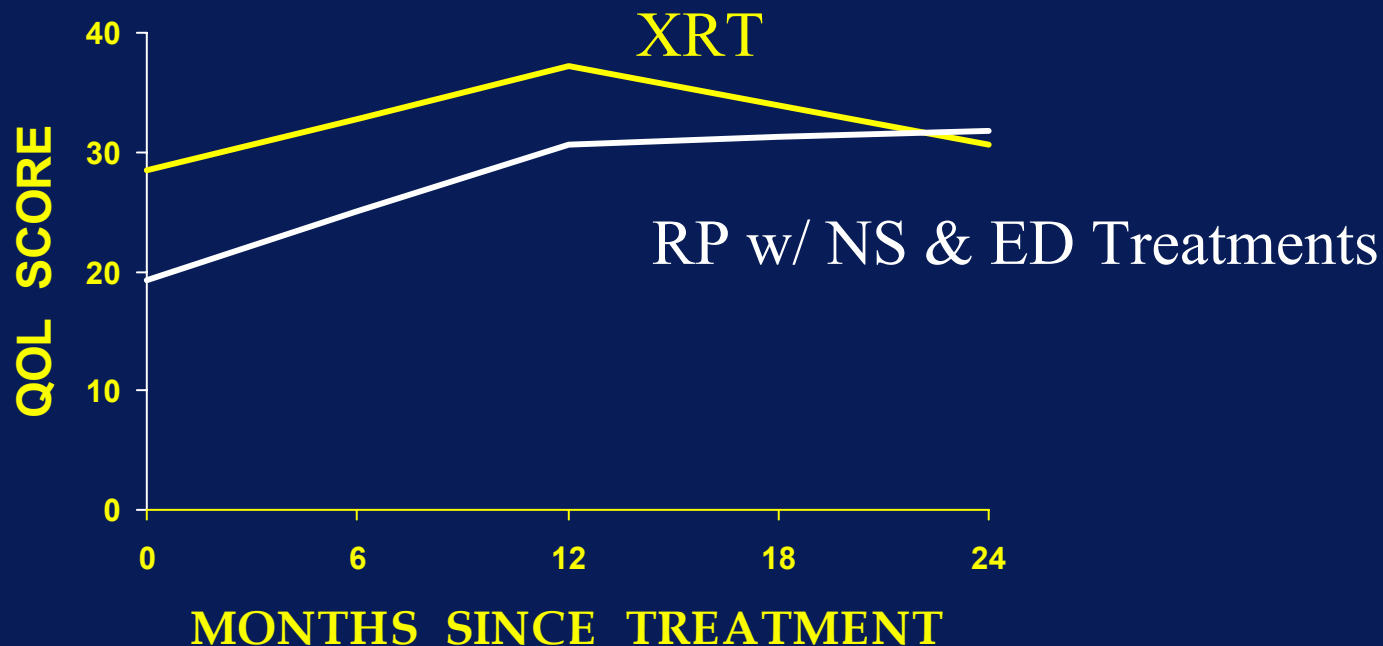
Baseline, 6, 12, 18, 24 mo

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Radical Prostatectomy vs XRT

UCLA - PCI Sexual Function

Higher score is better



The Human Cost of Prostate Cancer

Radical Prostatectomy vs XRT

Urinary Function and Bother

Prospective CaPSURE cohort of > 5000 men

n = 564 (RP & XRT)

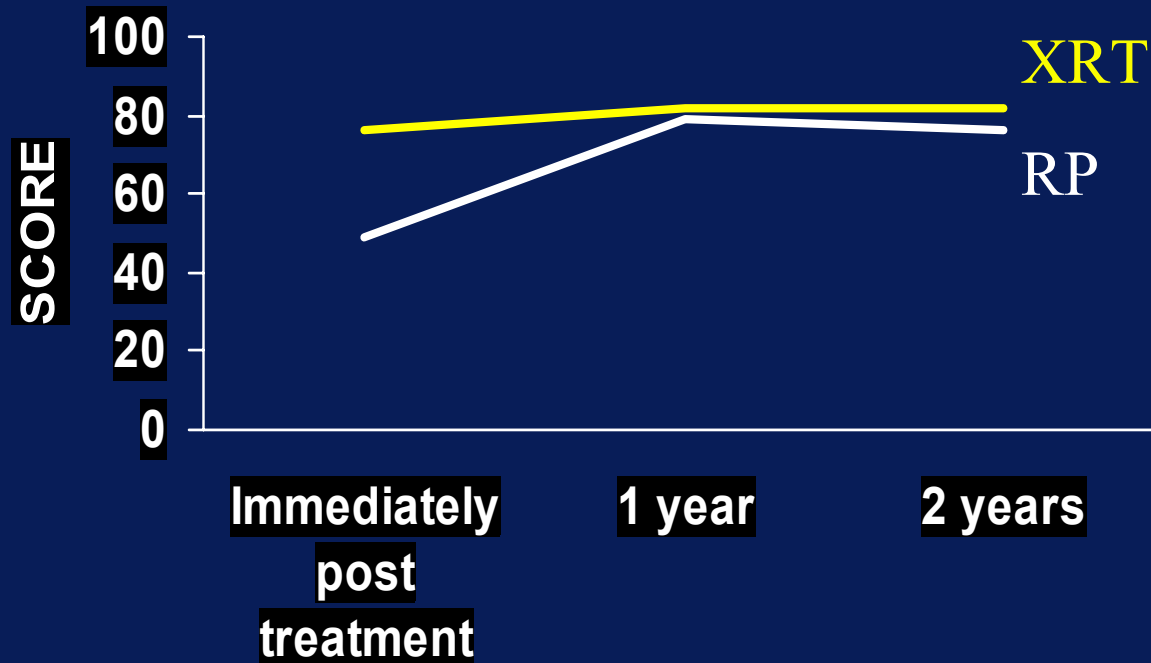
UCLA - PCI

Baseline, 6, 12, 18, 24 mo

The Human Cost of Prostate Cancer

Radical Prostatectomy vs XRT

UCLA - PCI Urinary Function



Higher is better

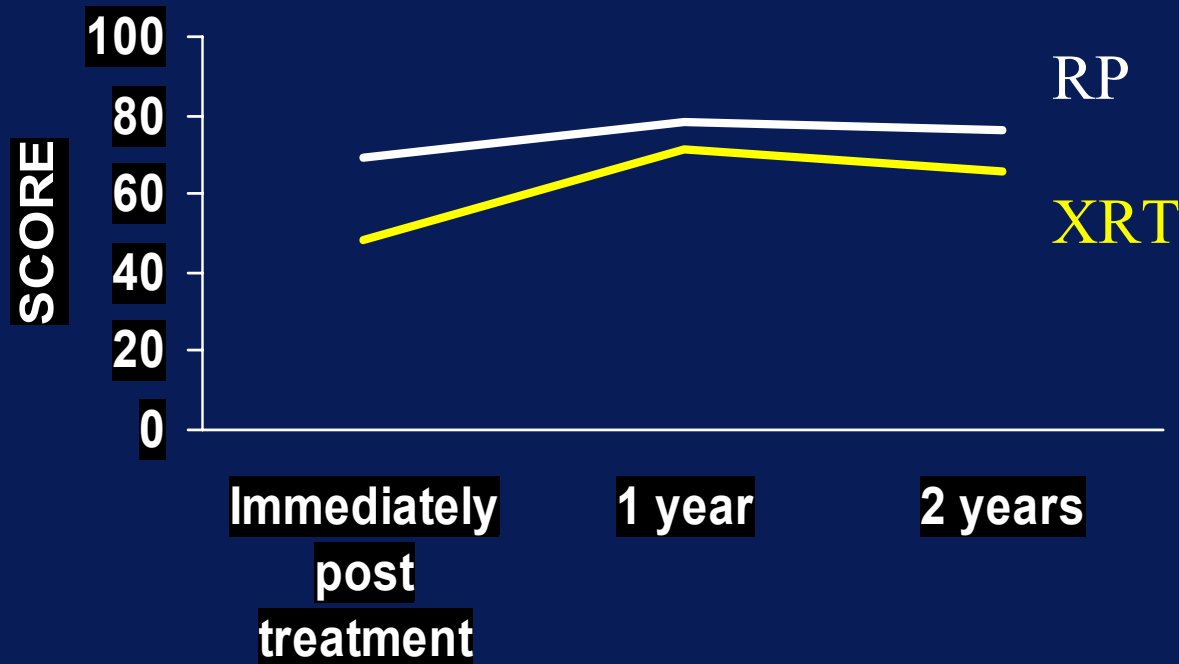
CaPSURE cohort

Litwin, 2000

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Radical Prostatectomy vs XRT

UCLA - PCI Urinary Bother



Higher is better

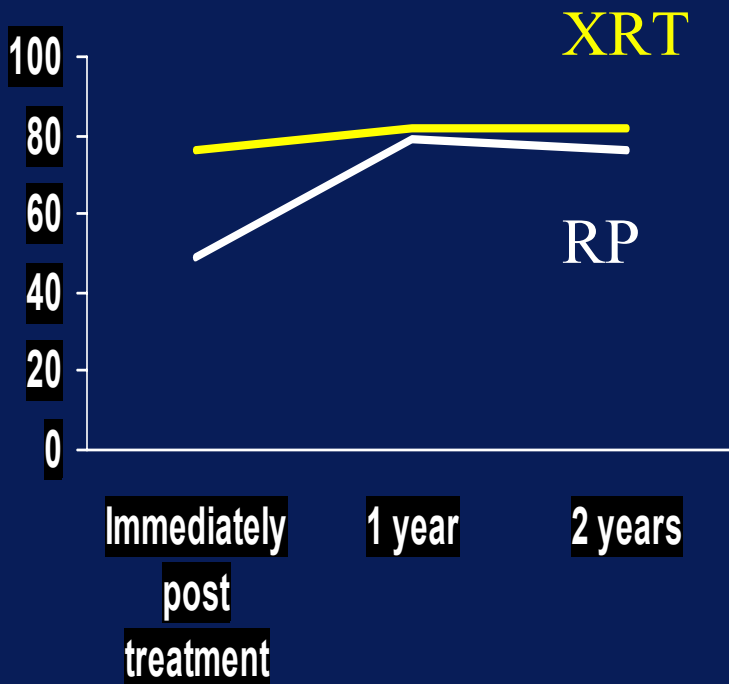
CaPSURE cohort

Litwin, 2000

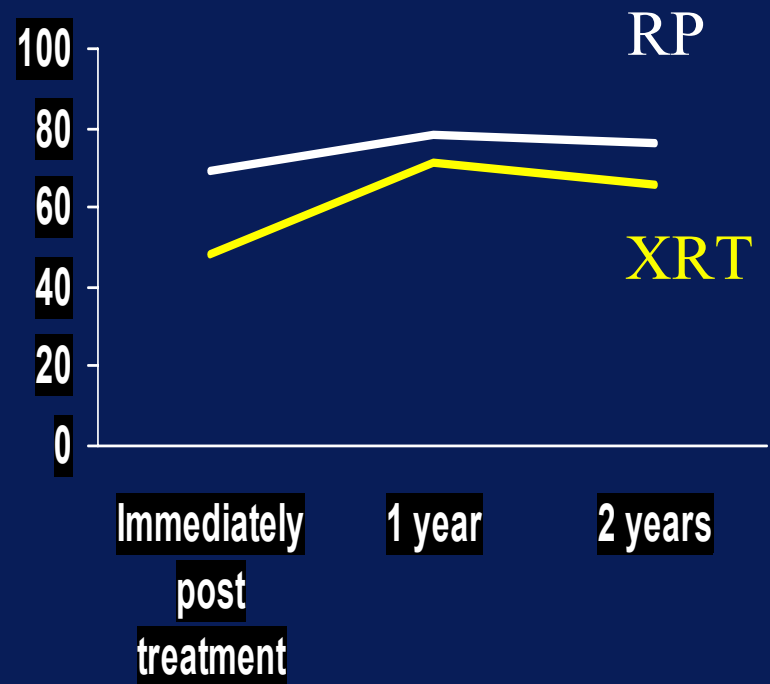
The Human Cost of Prostate Cancer

Radical Prostatectomy vs XRT

Urinary Function



Urinary Bother



Higher is better

CaPSURE cohort

Litwin, 2000

The Human Cost of Prostate Cancer

Radical Prostatectomy vs XRT vs Brachy

Urinary Function and Bother

Health Professionals Follow-up Study

n = 842 (RP, XRT, Brachy, Androgen Deprivation, WW, Other)

SF - 36, UCLA - PCI

Pre & Post Treatment

Multivariate analyses

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Radical Prostatectomy vs XRT vs Brachy

Urinary Domains (mean age-adjusted scores)

	RP	XRT	Brachy
Dryness	76	89*	87*
Bother	82	83	75*

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Radical Prostatectomy vs XRT vs Brachytherapy

UCLA longitudinal cohort

n = 307

RP mean age 60

XRT mean age 71

Brachy mean age 68

SF - 36, UCLA PCI

Baseline, then 1, 2, 4, 8, & 12 months after treatment

96% participation rate

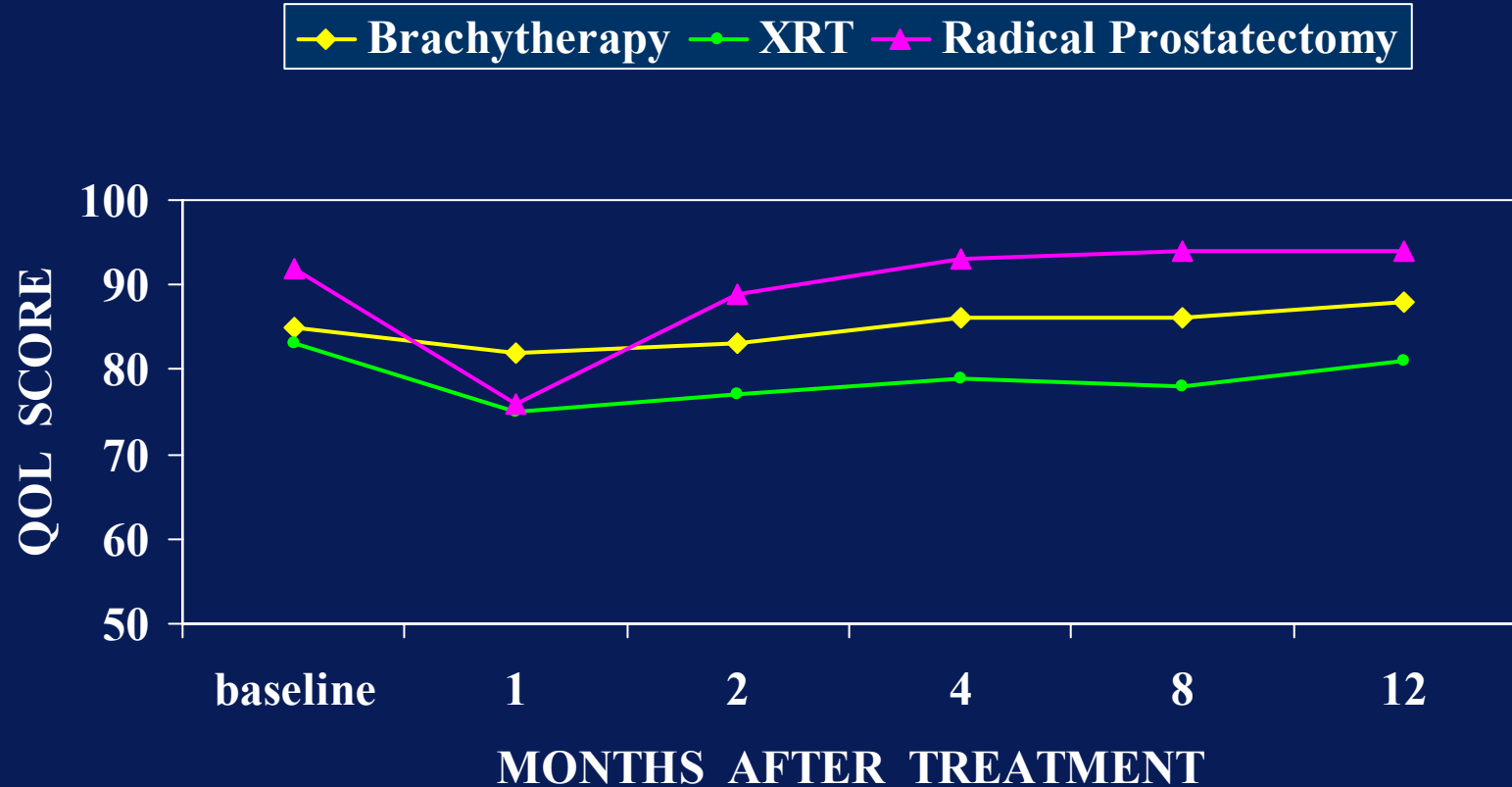


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Radical Prostatectomy vs XRT vs Brachytherapy

SF-36 Physical Function

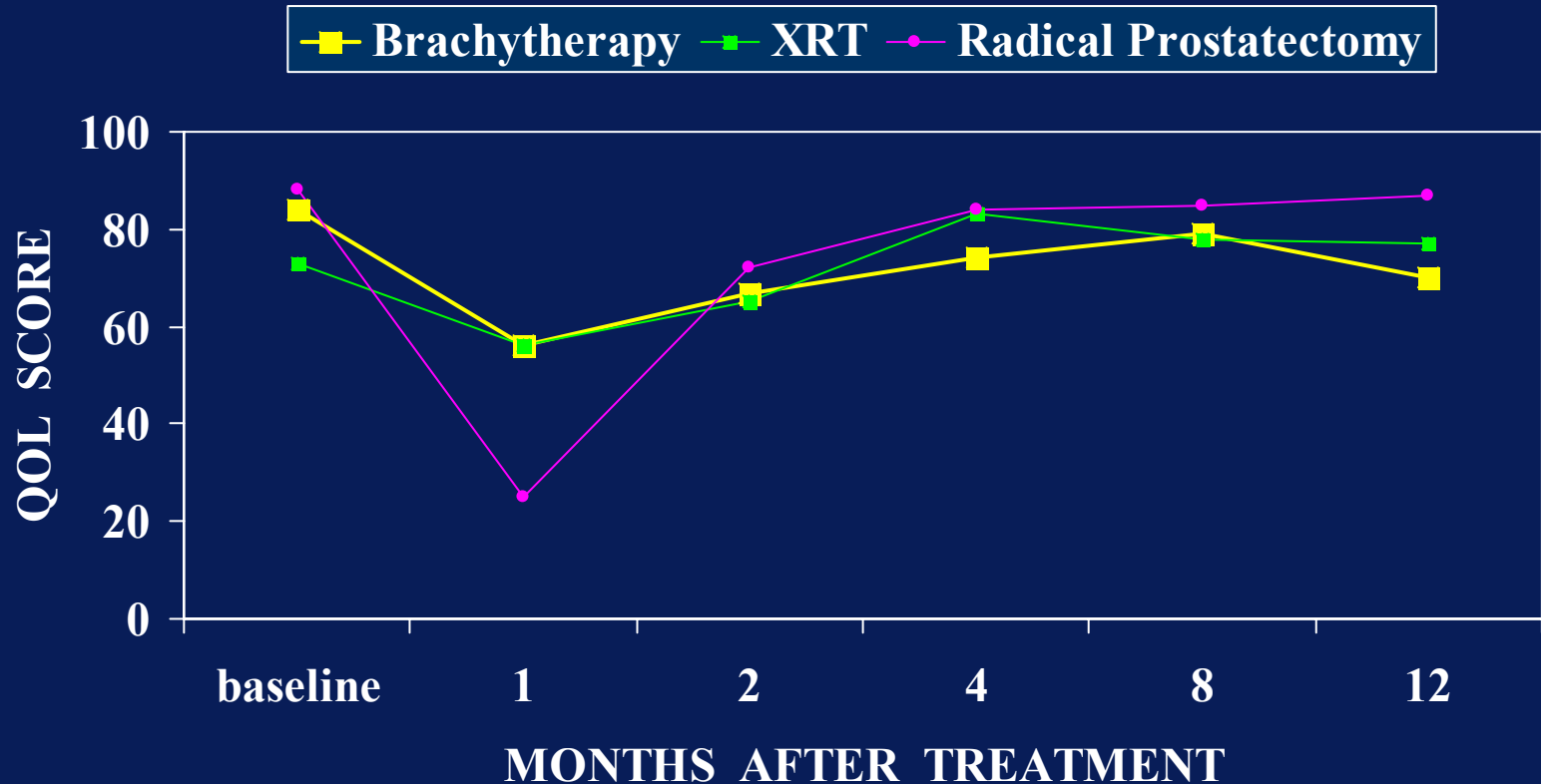
Higher score is better



The Human Cost of Prostate Cancer

Radical Prostatectomy vs XRT vs Brachytherapy

SF-36 Role Limitations due to Physical Problems Higher is better

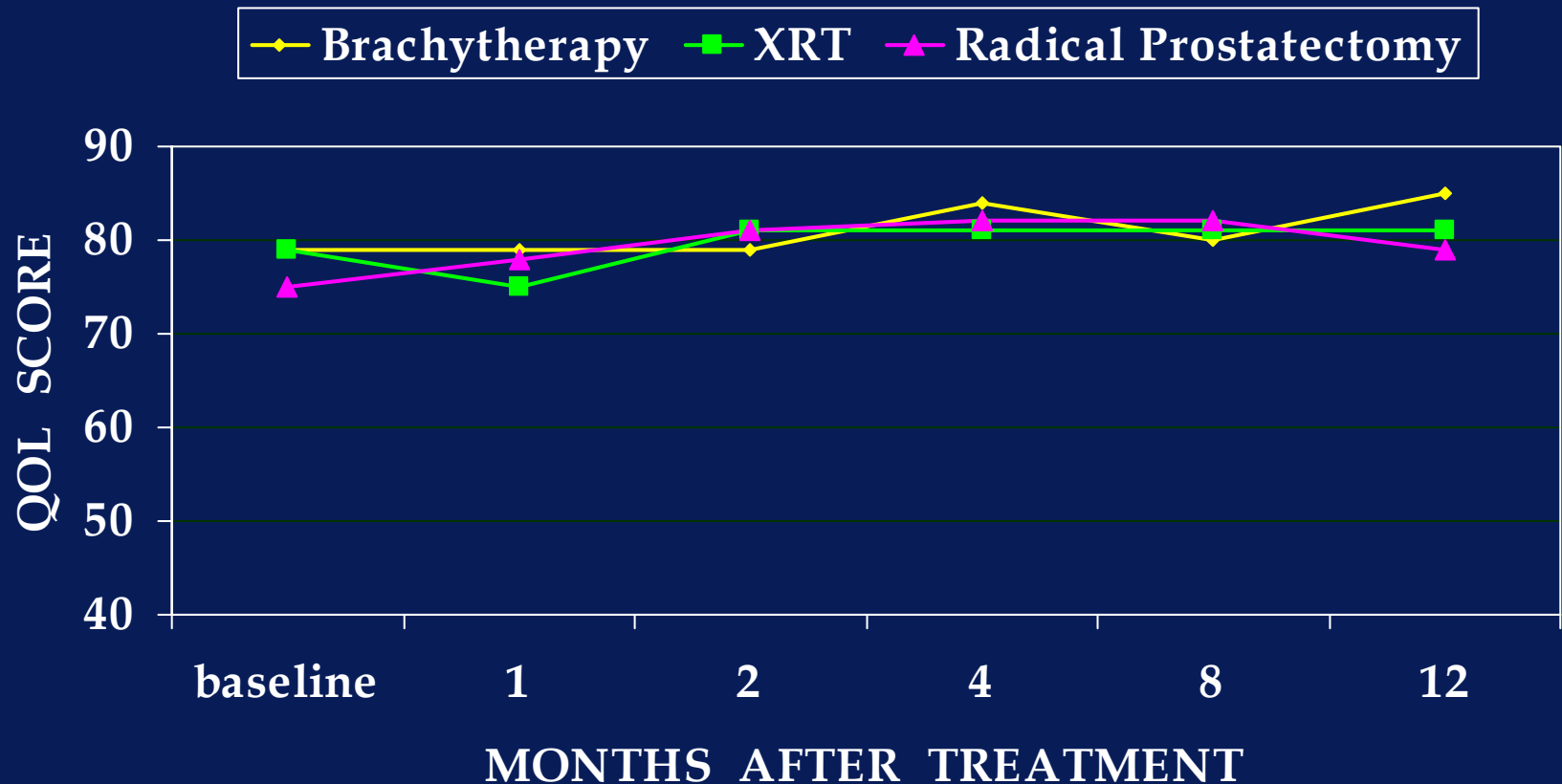


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Radical Prostatectomy vs XRT vs Brachytherapy

SF-36 Emotional Well - Being

Higher score is better

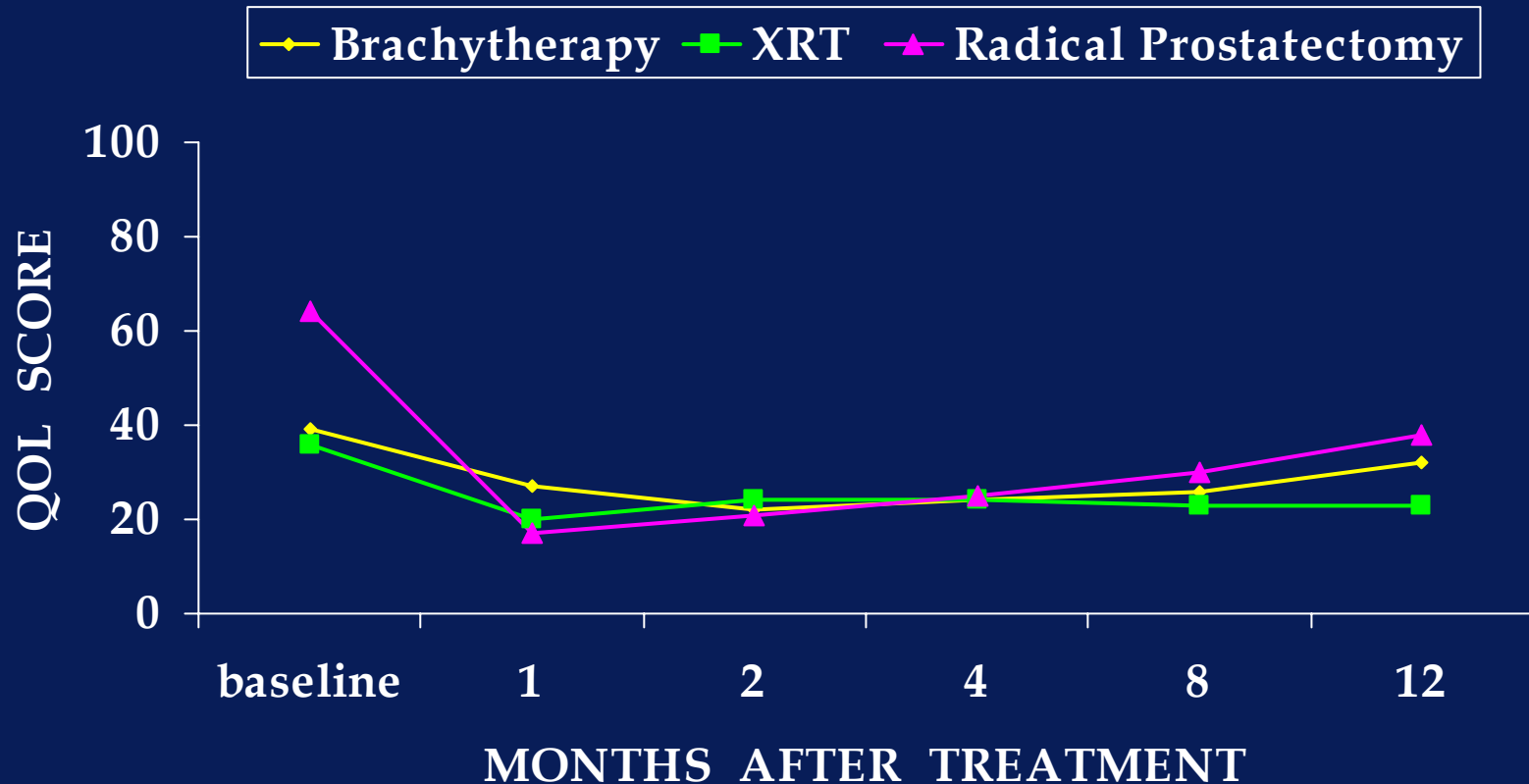


The Human Cost of Prostate Cancer

Radical Prostatectomy vs XRT vs Brachytherapy

UCLA - PCI Sexual Function

Higher score is better

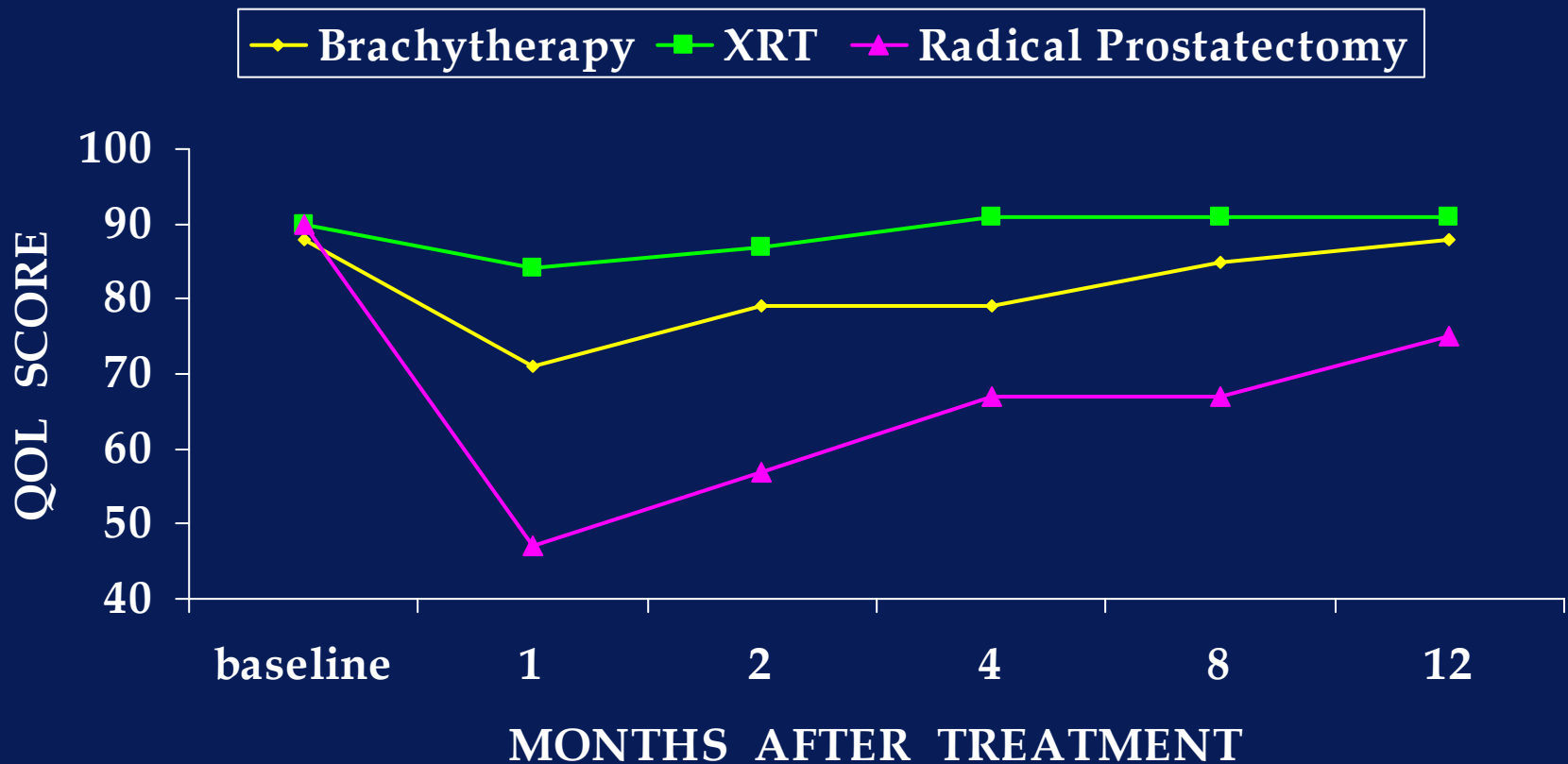


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Radical Prostatectomy vs XRT vs Brachytherapy

UCLA - PCI Urinary Function

Higher score is better

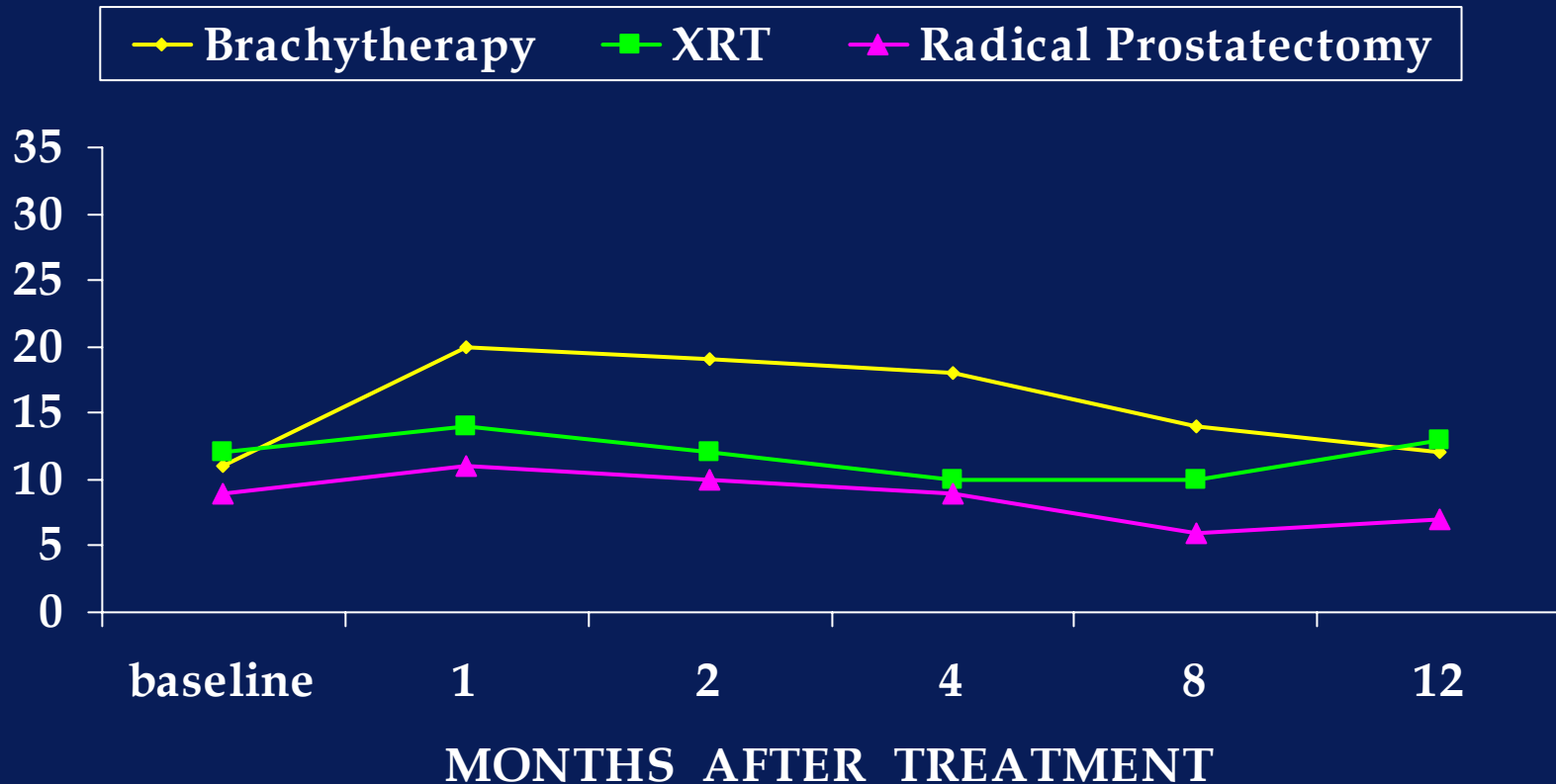


The Human Cost of Prostate Cancer

Radical Prostatectomy vs XRT vs Brachytherapy

IPSS Scores

Higher score is worse

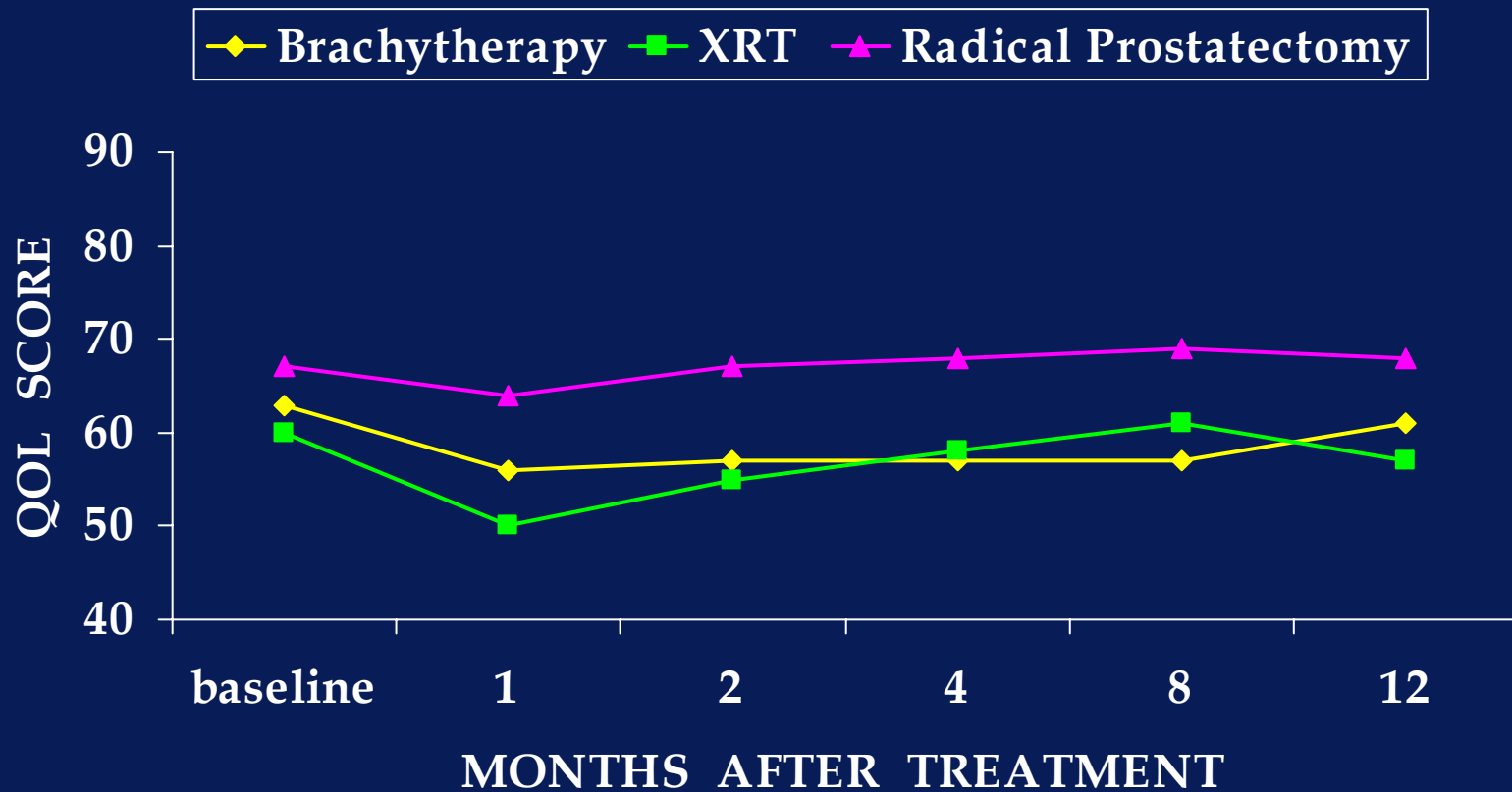


The Human Cost of Prostate Cancer

Radical Prostatectomy vs XRT vs Brachytherapy

UCLA - PCI Bowel Function

Higher score is better

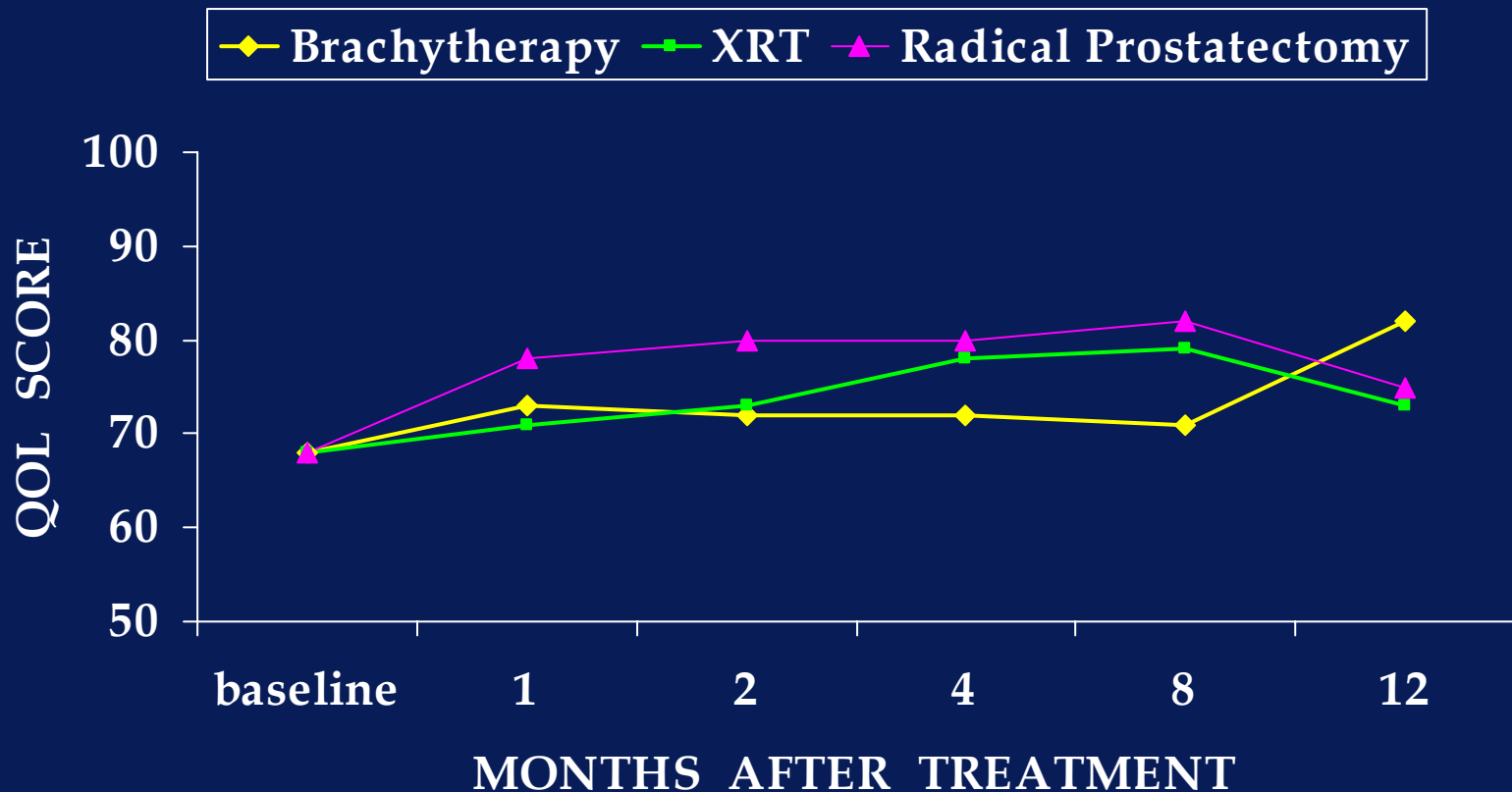


The Human Cost of Prostate Cancer

Radical Prostatectomy vs XRT vs Brachytherapy

Fear of Recurrence Index

Higher score is better



The Human Cost of Prostate Cancer

LESSONS TO TAKE HOME

- Quality of life domains are important components of medical decision making
- Interpret outcomes in context of patient's own baseline
- Validated instruments
- Patient self - assessment

The Human Cost of Prostate Cancer

Counseling patients

Quality vs Quantity of Life

- » Informed decision making
- » Shared responsibility
- » Patient perception is reality

Treating men with prostate cancer

Adding years to life

Adding life to years