

Quality of Life After Postprostatectomy Radiotherapy

TROG 08.03 RAVES Randomized Controlled Trial Substudy

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Quality of Life After Postprostatectomy Radiotherapy: TROG 08.03 RAVES Randomized Controlled Trial Substudy

Timing of salvage RT has limited impact on patient-reported quality of life

BACKGROUND

- Salvage RT (sRT) is the standard of care after RP for rising PSA or high-risk pathological features, based on RAVES, GETUG-AFU 17, RADICALS and meta-analysis: aRT does NOT improve event-free survival vs sRT.
- These trials reported clinician-rated toxicities; few multicenter prospective studies have examined patient-reported QOL differences between aRT and sRT.
- This substudy uses mature, prospective data from the RAVES RCT to explore QOL after postprostatectomy RT and the association between time from surgery to RT and patient-reported outcomes.

MATERIALS & METHODS

333

patients randomized

Phase 3

TROG 08.03 RCT

6 yrs

median follow-up

- Protocol-planned secondary analysis of RAVES phase 3 RCT: aRT (within 6 months of RP) vs sRT (when PSA ≥ 0.20 ng/mL). RT: 64 Gy/32 fr, prostate fossa only. No ADT or pelvic nodal RT.
- QOL: EORTC QLQ-C30 (global) + QLQ-PR25 (urinary, bowel, sexual activity, sexual functioning).
- Primary endpoint: MCIC = >0.5 SD decline from baseline. Three pre-specified analyses: (1) aRT vs all sRT; (2) aRT vs no-RT subgroup; (3) aRT vs sRT patients who received RT. Univariable regression for time from RP to RT.

KEY ANALYSES

Four pre-specified analyses to characterize QOL after postprostatectomy radiotherapy

1

aRT vs sRT (all randomized)

Higher MCIC in bowel & urinary symptoms in the aRT arm at 1–2 yr. At 5 yr, significantly more bowel MCIC in aRT arm (37% vs 20%; $p=0.009$). No differences in urinary symptoms, sexual activity, or sexual functioning at 3–5 yr.

2

aRT vs No RT (sRT arm who never received RT)

Higher MCIC in bowel symptoms at ALL time points (5 yr: 37% vs 12%). Severe urinary leakage at 5 yr: 16% vs 2% ($p=0.01$) — the most clinically relevant finding. No significant differences in global QOL.

3

aRT vs sRT (patients who actually received RT)

No consistent differences in urinary, bowel symptoms or sexual functioning from 1–5 yr after RT. Severe urinary leakage at 5 yr: 16% (aRT) vs 13% (sRT); $p=0.7$. sRT patients had worse sexual activity at 3 and 4 yr — likely confounded by higher-risk disease and ADT use.

4

Time from RP to RT — Univariable regression (sRT group)

No association between time from surgery to RT and any QOL domain (urinary, bowel, sexual functioning, sexual activity) at 3, 4, or 5 yr post-randomization (all $p>0.3$).

RESULTS

80 / 167

sRT patients received RT (48%)

52%

men SPARED from RT

16% vs 2%

severe urinary leakage at 5 yr

aRT vs no-RT (p=0.01)

Comparison	Bowel	Urinary	Sexual
aRT vs sRT (all)	↑ 1–2 yr 5yr p=0.009	NS (3–5yr)	NS
aRT vs No RT	↑ all points	↑ leakage 5yr (p=0.01)	NS
aRT vs sRT (received RT)	NS	NS	NS
Time RP → RT	No assoc.	No assoc.	No assoc.

TAKE-HOME MESSAGES

- ✓

sRT benefits QOL primarily by sparing ~52% of patients from any RT — not by delaying treatment.
- ✓

Postprostatectomy RT (aRT or sRT) causes modest bowel symptom worsening and increases long-term severe urinary leakage vs no-RT patients (16% vs 2% at 5 yr).
- ✓

When RT is required, the timing of sRT does NOT affect patient-reported QOL — supporting an early salvage RT strategy.
- ✓

Time from RP to RT shows no association with QOL outcomes in regression analysis — confirming sRT safety within the studied range.
- ✓

Most patients were treated with 3D-CRT; contemporary IMRT and PSMA-PET-guided selection are expected to further reduce toxicities in current practice.