Abstract

Quality of life in patients with liver metastases from colorectal cancer treated with first-line selective internal radiotherapy (SIRT): EQ-5D, EORTC QLQ-C30 and LMC21 results from the FOXFIRE study

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Background

Little is known about quality of life (QoL) in colorectal cancer patients with liver metastases treated with selective internal radiotherapy (SIRT) using Yttrium-90 resin microspheres combined with FOLFOX (standard chemotherapy) compared to FOLFOX alone. We report QoL results from a multicentre randomized trial: FOXFIRE.

Methods

Patients were randomized to FOLFOX or FOLFOX+SIRT. All patients received EORTC QLQ-C30, LMC21 and EQ-5D (3 level) questionnaires at baseline, cycle-4, and yearly. We

compared mean QoL scores between arms at each timepoint, adjusting for baseline scores, using a 5% significance level. No missing data was imputed.

Results

364 patients were randomised overall. Questionnaire response rates ranged from 88% (321/364) at baseline to 58% (157/273) at 12 months.

Patients randomised to SIRT showed significantly ($p<0.05$) worse scores at cycle 4 on 2 of 9 QLQ-C30 symptom scales (dyspnea, appetite loss), with significantly better scores for constipation and diarrhea. SIRT patients had significantly worse functioning scores on 3 of 6 scales at 12 months follow up (physical, social and global health), and significantly more pain. No other QLQ-C30 scales showed significant differences.

On the LMC21 SIRT patients exhibited significantly worse nutrition and fatigue scores ($p<0.05$) and significantly better sore mouth and peripheral neuropathy scores at cycle 4. At 12 months follow up SIRT patients had significantly worse scores on 2 of the 13 symptoms (fatigue and dry mouth).

SIRT patients showed an EQ-5D decrement of 0.07 ($p=0.06$) at 12 months, but no differences at other timepoints.

Conclusions

SIRT patients did not have consistently worse QoL during treatment, but had lower functioning scores at 12 months compared with FOLFOX alone. QLQ-C30 and LMC21 differences were consistent with the EQ-5D decrement for SIRT patients at 12 months. Significant clinical important differences were detected only for pain at 12 months on the QLQ-C30 and peripheral neuropathy at cycle 4 on the LMC21.

Clinical trial identification

FOXFIRE ISRCTN83867919;