

FOCUS ON RESEARCH

A pilot study of the feasibility and patient-related outcomes of performing a walking intervention in patients undergoing treatment for rectal cancer - (The REx Trial).

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Aim To assess the feasibility of performing prehabilitation (a walking intervention) in patients with rectal cancer in the form of a randomised controlled trial (RCT) to inform design of a definitive multicentred RCT.

Project Outline/Methodology All patients with rectal cancer undergoing chemo-radiotherapy (CRX) followed by potentially curative surgery in NHS Greater Glasgow and Clyde (GGC) were approached from August 2014 to March 2016. Each participant underwent baseline testing with physical tests and psychological/ Quality of life questionnaires and then randomised to either the intervention group (progressive walking programme for 12-17 weeks) or control group (usual care). Follow-up testing was undertaken prior to the planned surgery date. The characteristics, recruitment and retention of patients into the trial were also assessed.

Key Results A total of 296 patients were diagnosed with rectal cancer in NHS GGC, with 78 (26%) eligible for the trial. A total of 48 patients (62%) were recruited. The main reasons given for not participating were 'too tired' or 'too much going on'. A total of 8 participants did not complete the trial: 6 from the intervention group and 2 controls (retention rate 83%).

The mean age of participants was 65.3 (range 33.0-82.0) years, and were mainly male (65%), white (96%) and had completed secondary and higher/further education (44% and 40% respectively) with a relatively high proportion from affluent areas. 60% currently or had previously smoked and 88% reported alcohol consumption. Co-morbidities were present in 56%. 69% had a BMI Mean duration of the wlaking intervention was 14.2 weeks and participants reported high satisfaction scores in taking part.

Conclusions High recruitment and retention rates suggest a fully powered trial to measure the effects of the physical activity intervention in patients with rectal cancer is feasible. Consideration must be given to pre-trial education, increasing support from nursing and medical staff to optimise recruitment.

What does this study add to the field? This is the first RCT to assess feasibility of performing a walking intervention in patients with rectal cancer in a prehabilitation setting.

Implications for Practice or Policy All patients with rectal cancer undergoing CRX should be considered for a walking programme prior to starting their CRX, starting at the time of diagnosis and lead by a designated pre-habilitation team. This structure is already in place in the NHS as pre-habilitation could be a developing role for the Enhanced Recovery after Surgery (ERAS) nurse who already counsels patients with rectal cancer peri-operatively about diet, smoking, alcohol, weight and PA.

Where to next? The current programme is suitable for a definitive RCT. This future work will be powered on daily step counts and will consider the following:

- a) Pre-trial education for Clinical Nurse Specialists and Medical staff.
- b) Multi-centred
- c) Group interaction as motivational tool
- d) Recruitment of wider demographic group.

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