



Achieving an empty rectum for prostate radiotherapy.



A randomised controlled trial comparing two laxation regimens for patients receiving radiotherapy to the prostate in rural Australia.

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Aim:

To determine if, in addition to a low gas diet, a bulking laxative combined with a probiotic supplement are more effective than an osmotic laxative, at reducing rectal gas for patients receiving radiotherapy for prostate cancer.

Methods:

Seventeen patients were randomly assigned into either an intervention group (n=8) instructed to take a bulking laxative, a probiotic and a low gas diet and a standard care group (n=9) instructed to take an osmotic laxative with a low gas diet. Rectal gas ratings were determined from cone-beam computed tomography scans collected throughout treatment. Dietary and laxative compliance, bowel habits, fibre and fluid intakes were determined from food diaries.

Results:

The odds of a higher rectal gas rating were increased for the bulking/probiotic group compared with the odds in the osmotic laxative group (OR 3.2, 95% CI 1.77-5.78, $p < 0.001$). Average fibre intake was significantly higher in the bulking laxative group ($p = 0.036$), but not a contributing factor to the higher rectal gas levels (OR 1.001, 95% CI 0.92 - 1.09).

Conclusion:

This study is the first to compare two different laxatives on their effect on achieving lower rectal gas ratings for prostate radiation treatment. The osmotic laxative was more effective at achieving lower rectal gas ratings.

Implications:

This study informs clinical practice in the Australian and international setting on the differences in the two types of commonly used laxatives in their ability to reduce gas levels and achieve bowel evacuation during radiotherapy to the prostate.

Keywords

Prostatic neoplasms, radiotherapy, empty rectum, low gas diet, probiotics

For the full report on this project visit our website, follow the link to the Rural

Niki Weston is an Accredited Practising Dietitian currently working at the Central West Cancer Care Centre in Orange NSW. She has been working in the area of oncology and palliative care for the last 12 years and has an interest in research and student education.



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