

Non-drug therapies for the management of chronic constipation in adults: the CapaCiTY research programme including three RCTs

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programme (but on an unrelated research area) and received consulting fees from EnteroMed Ltd (London, UK) and Coloplast A/S (Humblebæk, Denmark). He has received payment or honoraria from Medtronic plc and support for attending meetings/travel from Medtronic plc. He is chairperson of the European Society of Coloproctology Research Committee and the Bowel Research UK (London, UK) Grants Committee. Jon Lacy-Colson was a paid consultant to Origin Sciences Ltd (Cambridge, UK) during the course of the programme (but on an unrelated research area). Rona Moss-Morris reports ad hoc payments for workshop therapist training in cognitive-behavioural therapy for irritable bowel syndrome (a related syndrome), consultancy payments and stock options from Mahana Therapeutics, Inc. (San Francisco, CA, USA), and being a beneficiary of a licence agreement between King's College London (London, UK) and Mahana Therapeutics, Inc., for a digital version of cognitive-behavioural therapy for irritable bowel syndrome. S Mark Scott received honoraria from Laborie (Orangeburg, NY, USA) for teaching during the course of (but unrelated to) the programme. Yan Yiannakou has received a grant from McGregor Healthcare Ltd (Macmerry, UK) to research the burden of disease in constipation and use of irrigation. Christine Norton is chief investigator on another programme grant on symptom management in inflammatory bowel disease.

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Plain English summary

The CapaCiTY research programme

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Plain English summary

Constipation affects nearly everyone at some stage in their life. However, about 1 in 100 people in the UK suffer chronic symptoms that fail to respond to simple treatments including exercise, drinking more fluid, better diet and laxatives.

We call this 'chronic constipation', and it can be very difficult to treat, even by experts. We can give stronger laxatives and newer drugs and provide nurse-led bowel retraining classes, bowel irrigation and even surgery. However, we do not know what tests we should do first and what treatments we should then use. The Chronic Constipation Treatment Pathway (CapaCiTY) programme enrolled 275 participants to three trials:

CapaCiTY trial 1 – how good are different types of specialist nurse-led bowel retraining (182 participants)?

CapaCiTY trial 2 – what type of bowel irrigation via the anus should we use (65 participants)?

CapaCiTY trial 3 – how good is a type of surgical operation called laparoscopic ventral mesh rectopexy for internal bowel prolapse (28 participants)?

Unfortunately, the studies did not recruit enough participants to tell us for sure which test or treatment is best; however, we were able to draw some useful conclusions by combining symptom and quality-of-life outcomes, costs of treatment and participant interview responses about their experience:

- All new treatments studied helped most participants.
- Simple nurse-led retraining programmes were at least as good as more costly, complex ones.
- Expensive tests did not help at an early stage.
- Participants prefer using higher-volume bowel irrigation than lower-volume bowel irrigation and it has better results.
- Despite worries about mesh, laparoscopic ventral mesh rectopexy seems safe in the short term and leads to a big drop in symptoms early after surgery. This was in very carefully chosen participants.
- The programme helped to ensure that we all use the same tests and nurse-led therapies. We also published the most detailed reviews so far, to our knowledge, of different types of surgery for chronic constipation.

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