



Preparing patients to recover more quickly - “Prehabilitation” for major abdominal cancer surgery

Description

Major abdominal surgery is an invasive treatment which causes a decline in physical fitness and often is associated with nutritional deterioration in the “peri-operative” phase (the time in the run up to and immediately after surgery). This keeps people in hospital for longer and increases risk of complications.

We believe that prevention can happen at every stage and in every part of the health service – even in acute and critical care. The Enhanced Recovery After Surgery pathway at Aintree Hospital, supported by Macmillan, helps prevent surgical complications and reduced hospital stays by better preparing patients for major surgery.

Context

Enhanced recovery or Prehabilitation aims to ensure patients are as healthy as they can be before they undergo an operation, and then are got back “on their feet” (quite literally) as quickly as possible to shorten their recovery time. This in turn will improve their health outcomes while reducing impact on the health service.

A multidisciplinary team including a dietitian, physiotherapist and therapy assistant began trialing the Prehab programme for two days a week for twelve months from August 2017. A pathway was set up whereby patients being planned for elective surgery were referred by clinical nurse specialists.

For many people, a cancer diagnosis is a catalyst for evaluating lifestyle choices, including exercise levels and diet, and the Aintree team wanted to use this teachable moment to the greatest effect. Each patient is given a one-to-one appointment with the dietitian and physiotherapist where they were given personalised exercise and nutrition advice based on their current fitness levels and nutritional status as determined using validated questionnaires.

Every patient was also invited to attend group exercise classes which they could attend for one hour once to twice per week leading up to their surgery and during chemotherapy. Patients were also educated on what to expect from the ERAS pathway with regards to diet, nutritional supplements and mobilising on the ward. Six-week post-op appointments were conducted to assess fitness and nutritional status after surgery and to refer on to community gyms or dietetic services.

Over 230 patients have been through the Prehab service so far, with measures taken from initial prehabilitation contact to six weeks post-operation.

Patients feedback through surveys pre-op has been very positive, with patients feeling better prepared for surgery, more able to recover quickly, and well cared for and motivated to look after themselves.

Questionnaires were repeated six weeks post-surgery and initial data analysis showed that 12% of patients actually had increased function and fitness on six-minute-walk-test, rather than decreased after surgery as would normally be expected. 6% increase in handgrip strength was also recorded.

Patients felt 80% more likely to make long term health and lifestyle changes, and their friends/family are now 60% more likely to make similar changes. Mean weight loss was 2.2kg from pre-surgery to post-surgery, with a median of 1kg, indicating that most patients took on board the education provided.

Quotes from patients:

“I approached my treatment in a better frame of mind”

“The service motivated me to keep active in preparation (and to recover after) surgery”

More recently, we have introduced longer 4-6 week post-op classes. which has also helped bridge the gap to the provision of community services, and helped to put pre-op patients at ease.

“I found it very good for improving my mood and outlook, and it made me feel more positive about myself.”

Learning

Having a broad MDT, including nurses and surgeons has been key to the success of this intervention. We've recognised the need to actually meet with them more often, as some patients were being missed. As we came to understand the local population better, we recognised a need to introduce more flexibility into the offering. Location in particular was an issue, many of the patients did not want to travel into hospital for pre-operation classes/sessions. Ideally, we would move some of our delivery into a community function.

Physios in the team have had to change their measures because it was difficult to consistently undertake six minute walk test due space constraints. Instead a standing test was introduced. Prehabilitation is a growing but not yet widespread practice and there are significant opportunities for spread. Historically, patients only see an AHP and other rehabilitative services after surgery, by which point outcomes may have already been adversely affected.

Evidence has shown there are other patient groups for whom Prehabilitation would be beneficial. Our team is exploring how we can help these groups, and have our first lung cancer and esophagectomy patients entering the pathway (at the pre-op stage).

Involving patients in steering group meetings and events to promote the service has been very helpful in shaping the services. Their stories and experiences are very powerful evidence of the value of Prehab services.

