ENHANCED RECOVERY AFTER SURGERY

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Introduction

Macmillan Specialist Advisor Dany Bell on how enhanced recovery after surgery fits with Macmillan’s wider work to support and improve cancer rehabilitation.

Enhanced recovery after surgery (ERAS) is defined by the NHS as a ‘modern evidence-based approach that helps people recover more quickly after having major surgery’.

It aims to ensure that people having elective surgery are as healthy as possible before receiving treatment, and that they get the best possible care during their operation, and while recovering from it.

Research shows that the earlier a person gets out of bed and starts walking, eating and drinking after having an operation, the shorter their recovery time will be.

Many of the types of surgery where enhanced recovery programmes can make a significant impact relate to treatment for cancers such as breast, colorectal and prostate. These programmes are increasingly being made available in hospitals, reducing length of stay and improving patient experience.

According to the national strategy Achieving World Class Cancer Outcomes: A strategy for England 2015–2020, there have been significant reductions in variation in ERAS practice over the past 15 years, but variations in surgical activity and outcomes from surgery remain across the UK.

At Macmillan, we are committed to supporting rehabilitation as a central element of cancer care and a key theme of the recommendations laid down by the Cancer Taskforce, as part of this strategy.

We emphasise the need for prehabilitation, a process of helping people prepare for treatment, which should be tailored to the individual and accessible to anyone with cancer, not just those undergoing surgery.

The need for cancer rehabilitation starts at the point of diagnosis by helping patients prepare for treatment (prehabilitation) and discharge home. There are so many things we can do to help patients get well and stay well, address the practical problems caused by cancer and its treatment, help people become as independent as possible and minimise the impact on carers and support services.

In 2013 as part of the National Cancer Survivorship Initiative, the National Cancer Action Team developed cancer rehabilitation pathways. These were informed by previous evidence reviews on the topic. More recently, we have worked with Health Education England, NHS England and the Transforming Cancer Services Team in London to refresh these pathways and make them available in a navigable form to health professionals at macmillan.org.uk/assets/macmillan-cancer-rehabilitation-pathways.pdf

Gathered together in one document, the pathways are aimed at those working with adults affected by cancer, and offer a guide to the types of rehabilitation interventions that patients may need at different stages of their treatment.

These range from generic interventions, such as conducting pre-surgery assessments in clinic, to more specific...
Sharing good practice

interventions such as assessment and assistance for incontinence problems. These pathways cover a wide range of treatments and symptoms, but currently much of the existing evidence base supports interventions for those undergoing surgery. This is a key area where a wide range of different professionals can all make an impact.

This edition of Sharing good practice highlights the incredible work going on across the country to support people with cancer to get the best possible outcomes from surgical treatment. On page iv, we hear from the UK’s first Macmillan head and neck enhanced recovery nurse, while on page vi we find out about an innovative new way of teaching healthcare staff about ERAS. And on page viii, a team in Oxford share their ERAS learnings from a trip abroad.

Do keep an eye out for further updates in Mac Voice on our work to ensure more people get the best outcomes they can from their cancer treatment.

Book now for ERAS UK Annual Conference
For the first time, Macmillan has partnered with the UK Enhanced Recovery After Surgery Society to deliver their next annual conference.

Featuring a range of talks on prehabilitation and optimising patients pre- and during treatment and recovery, the conference is open to all healthcare professionals with an interest the use of ERAS and prehabilitation principles in the treatment and recovery of cancer patients, for both surgical and non-surgical therapy. Macmillan professionals will receive a 20% discount on the registration fee.

The event takes place on Friday 16 November at the Radisson Blu Hotel, Heathrow, from 8.45am-5pm. For more information including registration details and how to submit an abstract, please visit erasuk.net

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Improving outcomes for head and neck cancer

Macmillan Enhanced Recovery Nurse Gabriella Massa describes how the enhanced recovery pathway helps people cope with the consequences of surgery.

Treatment for head and neck cancer can result in severe functional and cosmetic consequences, which can be permanent. For example, one of the major surgeries for this cancer is laryngectomy, which is the removal of the voice box. In this case, the person who has had the surgery will lose the ability to breathe through the upper airway (nose and mouth), and must breathe through a stoma in the neck; they will also permanently lose the ability to talk.

For a successful outcome with these delicate surgeries, it is essential that the person with cancer is engaged from the start, understands the consequences of the treatment and is in control of their care where possible.

Studies have shown that a clearly communicated care plan and high degree of patient engagement improve both clinical and patient-centred outcomes.\textsuperscript{2,3,4}

One way to accomplish this is through an enhanced recovery pathway (ERP). Currently in the UK, many parts of the clinical pathway for head and neck cancer surgery are poorly defined.

The head and neck cancer service at University College London Hospital (UCLH) has recently doubled to encompass Barts Health NHS Trust head and neck surgical services. This presents unique challenges around quality of care and communication, due to the added complexity of care being given over several sites with different teams involved.

Variation in practice and outcomes between teams and centres has meant that patients undergoing surgery have experienced different outcomes, which makes the potential consequences of treatment hard to predict for the team and for the person with cancer.

In addition, the minor complications and logistical problems that can occur after major surgery, for example a post-operative infection or liaising with the community, lead to delays in hospital discharge and inconvenience and discomfort for the patient.

These delays were not well reported, quantified or compared, either locally or nationally.

A new Macmillan role
At UCLH, people with head and neck cancer receive support and information from a team of head and neck clinical nurse specialists. In 2017, Macmillan funded and supported the introduction of my role, the first Macmillan head and neck enhanced recovery nurse post in the UK.

I have a pivotal role within the newly developed Head and Neck Enhanced Recovery Programme, which aims to provide seamless, gold standard care perioperatively to people undergoing major head and neck surgery.

Part of my role is to help coordinate service provision through a pre-assessment clinic, providing professional expertise, advice, care and support to patients undergoing head and neck surgery.
cancer surgery and their families. I work across organisational boundaries and act as a link between professionals and patients in a variety of settings.

During our monthly enhanced recovery meeting with medical and other allied health professionals, we discuss patient care, evidence-based practice and future plans for our enhanced recovery programme.

Recently we created an enhanced recovery pathway for people undergoing laryngectomy surgery, which we produced in partnership with patients. It is a daily basis protocol that supports the team to deliver the best possible care. The data shows that in six months the embedded protocol has decreased the average length of hospital stay from 32.6 days to 23 days.

Patients enrolled in the enhanced recovery pathway are more confident to look after themselves and be independent. The pathway starts before the surgery in the pre-assessment clinic, where the anaesthetist and pre-assessment nurse evaluate each person’s fitness for surgery. At this point, basic equipment such as suction machines or nebuliser machines are ordered, so by the time the patient has the surgery the equipment will be ready on the ward. This gives people more time to learn how to use the equipment and build their competence and confidence to use it independently at home. This also reduces some of the pressure on carers and relatives.

**Education and research**

Part of my role is to participate in research and education projects within the department in order to advance clinical excellence in the care of this patient cohort. I am part of a national research project called the Perioperative Quality Improvement Programme (PQIP). This looks at complications from surgery, length of stay and re-admission for each patient enrolled and compares this to a national average.

I am also responsible for teaching the nursing team within the head and neck ward and intensive care about enhanced recovery and its protocols.

This role has allowed me to expand my knowledge and meet leading healthcare professionals at the national ERAS UK Conference.

There are lots of different challenges involved, and getting consensus across the team is not easy. However, our results have built up trust in the programme, and I strongly recommend the principles of the programme to anyone working with patients undergoing surgery.

**Further information**

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Taking a new approach with ‘Take a Break’

Senior Enhanced Recovery After Surgery (ERAS) Research Nurse Angie Balfour on an effective and fun way to provide ERAS education.

Implementing an ERAS programme is known to reduce length of hospital stay and reduce post-operative complications following elective surgery.\(^5,6,7,8\) But despite the extensive evidence base, clinical variation still exists in surgical departments.

Successful implementation requires designated ERAS nurses and targeted education programmes, yet ERAS principles do not routinely feature in all nursing education curriculums. Traditional practices are still being taught in higher education institutions, and newly qualified nurses and doctors are often not equipped with the knowledge to challenge ongoing surgical dogmas.

As well as considering the educational needs of nurses, we must consider how new methods will be implemented and how often nurses will be supported to expand their knowledge base and keep up to date with the latest evidence.

ERAS was recently described as a ‘surgical revolution’ by Professor Olle Ljunqvist, one of the co-founders of the ERAS\(^®\) Society in a recent TEDx talk.\(^9\) Professor Henrik Kehlet has also published this year highlighting a number of challenges to adjusting clinical practice to evidence-based surgical care, including a lack of knowledge.\(^10\) While education and training for surgical teams is essential, formal training sessions can be difficult to achieve when staff have so many competing demands on their time.

ERAS education

At NHS Lothian, several different strategies have been implemented to address ERAS education, including face-to-face training sessions with all new staff and group teaching whenever possible. However, these sessions were poorly attended and labour intensive for the ERAS nurse to deliver. It was also felt that having a range of different speakers and different topics would help to boost interest levels.

At a presentation at the Royal College of Anaesthetists, we heard about ‘tea trolley training’, an innovative way of providing training on techniques to establish an airway in a patient with respiratory failure. At the Royal United Hospital in Bath, short teaching sessions are held for any available staff in the theatre suite over a cup of tea.\(^11\)

This inspired us to introduce a programme of ‘Take a Break’ teaching on the principles and practice of ERAS to our multidisciplinary team for colorectal surgery.

Further information

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This initiative has been led by one of the consultant anaesthetists and the ERAS nurse at the Western General Hospital in Edinburgh. They agreed to present a selection of topics relevant to ERAS, communicating the main messages within a 10-minute presentation. The content of these short talks is varied and delivered by different members of the clinical team, including anaesthetists, surgeons, dieticians and physiotherapists.

**The topics include:**

- Fluid management
- Analgesia
- Tissue viability
- Surgical stress response
- Nutrition management
- Early mobilisation
- Frailty and postoperative delirium

Armed with a trolley, tea urn and chocolate biscuits, we visited the doctor’s rooms, recovery suite and duty rooms of the colorectal wards and talked through our presentation with any willing members of the team. We then had a brief question and answer session.

Over the past 18 months, 25 teaching sessions have been conducted on a range of topics. More than 300 staff have attended a session so far, including a mix of medical and nursing staff.

‘Take a Break’ teaching has been well-received, is easily repeatable and offers an effective and fun way to provide ERAS education to the team. This approach has reached more staff than we would expect to attract to a more formal teaching slot.

We are currently recruiting more clinical staff to provide these sessions and aim to run them weekly. The next step is to obtain some more formal feedback.

Take a Break teaching was presented as a poster at the ERAS UK 2017 conference and has attracted interest from other specialties and units.
Improving quality through shared practice

Enhanced Recovery Programme Facilitators Hamira Ghafoor and Elaine Tustian share new learnings about enhanced recovery following a multidisciplinary team visit to Seattle.

Enhanced recovery after surgery (ERAS) is proven to reduce surgery-related risks and enable a swifter recovery following surgery so that life can return to normal as quickly as possible.12

Shared decision making between people with cancer and their clinical teams is a central element of enhanced recovery, which is made up of four key stages:

• planning and preparation before surgery
• reducing the physical stress of surgery
• structured care during and after surgery
• early mobilisation and enhanced nutrition to aid recovery.

The Oxford University Hospitals ERAS programme for oesophagectomy surgery began in April 2012. The surgical removal of the oesophagus or food pipe, usually as part of treatment for oesophageal cancer, is a major operation.

The multidisciplinary team involved focused on creating a structured care pathway, guided by evidence, to formalise their existing team practices and reduce any variations. A patient information leaflet and diary were also created to complement the pathway, supporting and empowering people to be active participants in their care.

At the launch of the Oxford oesophagectomy ERAS programme, the average length of hospital stay was 12.5 days (as of April 2012), which was in line with the national average of 13 days. The team felt that more improvements could be made to have a greater impact on surgical outcomes and enhance patient and staff experiences. We looked to other centres with ERAS oesophagectomy programmes for inspiration.

Relaunching the patient pathway

The pathway relaunch involved the team sharing their experiences and learning with other teams within the trust, and communicating key changes to all departmental staff involved in patient care. Representatives from the local patient charity support group also attended the pathway relaunch event. Changes to the Oxford ERAS oesophagectomy pathway following the visit include:

Before surgery:
• earlier ERAS discussion by the consultant surgeon in outpatients
• physiotherapy assessment and inspiratory muscle training goals outlined
• dietitian assessment and regular follow up.

After surgery:
• intensive care unit stay for initial 24 hours
• daily physiotherapy review and input
• further enhanced mobility goals
• proactive constipation management
• revised jejunotomy feeding regime (higher protein, lower volume) to optimise nutrition and hydration
• pureed oral diet commenced in hospital and continued after discharge.

Taking ownership

The trip to Virginia Mason Medical Center created a desire for change that could be substantiated. Each speciality has identified and taken ownership of the
changes in their own clinical area of expertise. Upper GI Ward Sister Claire Coleman says, ‘It is essential to have everyone within the multidisciplinary team on board. At Virginia Mason, ERAS was embedded in everyone’s mind – nurses, doctors, dietitians and physios. They didn’t have daily paperwork or written pathways as such, but it had become a culture. This meant that patients progressed every day no matter who was working.’

Since making these changes, the average length of hospital stay has decreased from 11 days (from Oct 2013 to Sept 2015) to 9 days (from Oct 2015 to Sept 2017).

The team is now working towards creating a structured prehabilitation programme for individuals undergoing major surgery. Since the relaunch, patient feedback has also been positive, with an earlier awareness of the ERAS programme through different members of the multi-disciplinary team and increased engagement with their ERAS goals.

We were impressed by the seven-day ERAS oesophagectomy pathway at the Virginia Mason Medical Center in Seattle. After discussions between Upper Gastro-Intestinal Consultant Surgeon Nick Maynard at Oxford and Upper GI Consultant Surgeon Donald
Low at Virginia Mason, the Oxford Upper GI team were invited to visit Seattle in September 2015 and experience their programme first hand. The visit was funded by the trust and included:

- Observing ERAS role at Virginia Mason
- Comparing Virginia Mason’s overall ERAS programme to Oxford’s
- Observing oesophagectomy surgeries
- Visiting the high dependency unit, wards and outpatient clinics
- Opportunities to hear patients’ experiences and learn what was important to them
- Out-of-hospital Oxford ERAS team networking and group meetings to share individual learnings and agree collective changes.

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ERAS Physiotherapy Assistants Robert Simon and Madalina Puiu demonstrating inspiratory muscle training.
Resources

ERAS Society (UK)
ERAS UK aims to improve patient recovery after surgery by promoting knowledge, understanding and research regarding optimal outcomes.
erasuk.net

ERAS Society bibliography
A useful reference list of ERAS articles relevant to nursing.
erassociety.org/bibliography

Macmillan Cancer Rehabilitation Pathways
A guide for those working with adults affected by cancer on the types of rehabilitation interventions that patients may need at different stages of their treatment.
macmillan.org.uk/assets/macmillan-cancer-rehabilitation-pathways.pdf

References


9. Ljungqvist, O. (2018) TEDx Talk – Improving surgery by talking to each other. TEDx Talks [Published online 16th Feb 2018]


Have you got an idea for a future issue of Sharing good practice? Get in touch at macvoice@macmillan.org.uk