



Cytoreductive surgery (CRS) followed by heated intraoperative peritoneal chemotherapy (HIPEC)

Introduction

This leaflet will give you information about what is involved in cytoreductive surgery (CRS) and heated intraoperative peritoneal chemotherapy (HIPEC). A member of the team will discuss everything in the leaflet with you, but if you have any questions please contact your colorectal clinical nurse specialist (CNS) or key worker. Contact details are listed at the end of this leaflet.

What are CRS and HIPEC?

CRS and HIPEC are a treatment combination used for patients with an advanced form of cancer. This treatment combination is used when cancer has spread from the appendix, large bowel (colon) or rectum to the peritoneum, which is the membrane lining the inside of the abdomen. If left untreated the cancer may cause bowel obstruction, pain and an accumulation of fluid within the peritoneum. The aim of CRS and HIPEC is to cure you of peritoneal cancer deposits. This is when there are small cancers on the lining of the inside of the abdomen.

The procedure is carried out using a general anaesthetic so you will be asleep throughout. This is an 'open' rather than a 'keyhole' surgical procedure, so you will have a cut along your abdomen (tummy). During the CRS part of the procedure, the surgeon will remove all the visible tumours within the peritoneal cavity. The cavity will then be washed out with heated chemotherapy (HIPEC) in order to eliminate any tiny, residual cancer cells. These are too small to be seen and may have been left behind during surgery. The type of chemotherapy used will be Mitomycin C. The whole procedure is likely to take between nine and 12 hours.

What are the benefits of the procedure?

The benefits to having this procedure are:

- Increased survival rates
- Relief from symptoms
- Reduced tumour recurrence rate
- Improvement in day-to-day activities
- Being able to return to work (if applicable)

What are the risks of the procedure?

The risks associated with this procedure are similar to those involved in any abdominal surgery you may have had previously. These include:

- Wound infection
- Breathing difficulties
- Blood clots
- Kidney failure
- Allergic reaction to the chemotherapy used

Please note that the consultant who prescribes your chemotherapy will check the risk of any allergy you may have to Mitomycin C before the procedure. An allergic reaction would be extremely unlikely as very little of the chemotherapy agent gets into the blood stream during the procedure.

What preparation is needed ahead of my procedure?

In preparation for your surgery you will meet with the consultant in charge of your care. You will also need a pre-assessment, held on the ground floor (Level 3) of the out-patient's department at St. Mark's Hospital. We will send you a letter with your pre-assessment appointment date. Your colorectal cancer nurse specialist (CNS) will discuss any worries or concerns you may have and answer any questions.

The pre-assessment team will advise if and when you need to stop any of your current medications. If you are unsure at any time, please contact your colorectal CNS. You will be given 'preOp' drinks to drink, to give you some carbohydrates (energy) before the operation. The pre-assessment team will give you an instruction sheet to explain when to take the drinks. If you are to have a stoma, the surgeon will let you know and you will need to meet the stoma nursing team.

What do I need to bring in to hospital?

Things to bring in to hospital with you:

- Wash bag with toiletries
- Slippers
- Dressing gown
- Mobile phone (on silent) - please note that we cannot accept responsibility should any of your valuables go missing during your stay
- Loose-fitting clothes to wear for going home and during your stay in hospital

What happens straight after the procedure?

You will be closely monitored after the procedure in our intensive-care unit (ITU or ICU) so that we can act straight away should you have any complications after your operation. Your monitoring will include blood pressure and daily blood tests initially.

During the surgery you may have abdominal drains put in place and a urinary catheter will also be inserted. The urinary catheter and drains (if used) will need to stay in place for the first few days after your surgery. Your wounds will be stapled closed and they will remain in place for 21 days. If you are well enough to go home with the staples (clips) still in place they can be removed by a nurse or doctor at your GP practice. Otherwise this can be done in hospital. Your colorectal CNS will talk to you about this further when you meet. You will be expected to follow the enhanced recovery programme, which your colorectal CNS will go through with you in more detail nearer the date for your surgery.

How long should I expect to be in hospital?

You should expect to stay in hospital for 10 to 21 days. You will see your consultant or a member of the team every day (or a doctor that is familiar with your case). They will review you and look out for any complications that may occur during this time. They will also give you a daily plan of care. Your colorectal CNS will visit you once a week. If you have any worries or concerns whilst on the ward, please speak to the nurse in charge. If you feel you need to get in touch with your colorectal CNS, please ask a nurse on the ward to bleep them.

What will happen in the longer term after the procedure?

After your CRS and HIPEC procedure, your case will be discussed at the colorectal multi-disciplinary team (MDT) meeting, which is held every Thursday and includes all the staff who was involved in your care. Your colorectal CNS will give you a follow-up telephone call after you go home but please call us if you have concerns.

Usually two weeks after you go home you will return to clinic to be reviewed by your surgeon. At this appointment we will discuss the outcome from the MDT meeting and ensure that your wounds are healing well.

What follow up care will I receive after my procedure?

You will be seen at the hospital within the first three months after your procedure. After this, monitoring arrangements are very individual and this will be discussed with you. It may be preferable for you to have any imaging (MRI, X-ray, ultrasound) arranged by your local hospital and that we are sent the results. In general, it is likely that you will be followed up every six months for two years and then every year until you reach five years after surgery.

Is there anything I need to watch out for at home?

Please contact your GP or your colorectal CNS if you experience any of the following:

- Persistent nausea (feeling sick) or vomiting (being sick)
- Persistent bleeding from the rectum (back passage)
- Fever or a high temperature (37.5°C/101.5 °F or above)
- Pus (oozing) or increasing redness around the wound site
- Increasing pain/diarrhoea

What should I do if I want further information?

If you need advice about your treatment or side effects outside normal working hours, please contact your GP or NHS 111 or in life-threatening circumstances call the emergency services on 999. This will depend on the nature and urgency of your concern.

If you have a non-urgent concern related to your cancer and treatment, please contact your Clinical Nurse Specialist: Complex Cancer and HIPEC on 020 8869 2487.

Macmillan Cancer Support: 0808 808 0000

Macmillan Cancer Support to produce a wide range of booklets and provide information on their website describing options available for advanced colon and rectal cancer plus related topics related to cancer.

Frederick Salmon Ward - 020 8235 4191

Perioperative Specialist Nurse Practitioners - 020 8235 4000 and ask for bleep 450

Stoma care at St Mark's Hospital – 020 8235 4110

Secretary for the Complex Cancer Clinic – 020 8235 4177

Complex Cancer Patient Pathway Co-ordinator – 020 8235 4128

St Mark's Hospital, Watford Road, Harrow, Middlesex HA1 3UJ

General Trust Information

Patient Advice and Liaison Service (PALS)

PALS is a confidential service for people who would like information, help or advice about the services provided by any of our hospitals. Please note that this service does not provide clinical advice so please contact the relevant department directly to discuss any concerns or queries about your upcoming test, examination or operation.

If you would like this information in an easy to read format, large print, braille, different format or language, please contact the PALS team on 020 8869 5118 or email inwh-tr.PALS@nhs.net. We will do our best to meet your needs.