

Understanding NICE guidance

Information for people who use NHS services

Treating peritoneal carcinomatosis with surgery followed by direct, heated chemotherapy

NICE 'interventional procedures guidance' advises the NHS on when and how new procedures can be used in clinical practice.

This leaflet is about when and how surgery and direct, heated chemotherapy can be used in the NHS to treat people with peritoneal carcinomatosis. It explains guidance (advice) from NICE (the National Institute for Health and Clinical Excellence).

Interventional procedures guidance makes recommendations on the safety of a procedure and how well it works. An interventional procedure is a test, treatment or surgery that involves a cut or puncture of the skin, or an endoscope to look inside the body, or energy sources such as X-rays, heat or ultrasound. The guidance does not cover whether or not the NHS should fund a procedure. Decisions about funding are taken by local NHS bodies (primary care trusts and hospital trusts) after considering how well the procedure works and whether it represents value for money for the NHS.

This leaflet is written to help people who have been offered this procedure to decide whether to agree (consent) to it or not. It does not describe peritoneal carcinomatosis or the procedure in detail – a member of your healthcare team should also give you full information and advice about these. The leaflet includes some questions you may want to ask your doctor to help you reach a decision. Some sources of further information and support are on the back page.

What has NICE said?

The evidence about this procedure shows that there is some improvement in survival for some patients with peritoneal carcinomatosis whose primary cancer is colorectal, but there is not a lot of evidence about survival rates for patients whose primary cancer is from a different origin. The safety evidence shows significant risks, which need to be balanced against any possible benefit for each patient. If a doctor wants to use this procedure, they should make sure that extra steps are taken to explain the uncertainty about how well it works, the potential risks of the procedure and the long recovery period. This should happen before the patient agrees (or doesn't agree) to the procedure. The patient should be given this leaflet and other written information as part of the discussion. There should also be special arrangements for monitoring what happens to the patient after the procedure.

A team of specialist healthcare professionals should decide which patients should have this procedure. The team should include clinical oncologists and surgeons with experience of this procedure.

NICE has encouraged further research and may review the procedure if more evidence becomes available.

This procedure may not be the only possible treatment for peritoneal carcinomatosis. Your healthcare team should talk to you about whether it is suitable for you and about any other treatment options available.

Treating peritoneal carcinomatosis with surgery followed by direct, heated chemotherapy

The medical name for this procedure is 'cytoreduction surgery followed by hyperthermic intraoperative peritoneal chemotherapy for peritoneal carcinomatosis'.

The procedure is not described in detail here – please talk to your specialist for a full description.

Peritoneal carcinomatosis is an advanced form of cancer found in the peritoneal cavity (the space between the organs in the abdomen and the abdominal wall). This type of cancer happens when cancers from the bowel or rectum (colorectal cancer), appendix or ovaries spread. It is associated with short survival and poor quality of life, and may lead to bowel obstruction (blockage), accumulation of fluid in the peritoneal cavity and pain.

This procedure has two parts and is done with the patient under general anaesthesia. The first part of the procedure is 'cytoreduction surgery', in which all possible visible cancerous tissue is removed. In the second part of the procedure (hyperthermic peritoneal chemotherapy), the peritoneal cavity is flushed with heated chemotherapy fluid, with the aim of eliminating any microscopic traces of disease left behind. Sometimes a further course of chemotherapy may also be given.

Summary of possible benefits and risks

Some of the benefits and risks seen in the studies considered by NICE are briefly described here. NICE looked at 22 studies on this procedure.

What does this mean for me?

If your doctor has offered you this procedure, he or she should tell you that NICE has decided that the benefits are uncertain and there are significant risks. This does not mean that the procedure should not be done, but that your doctor should fully explain what is involved in having the procedure and discuss the possible benefits and risks with you. You should only be asked if you want to agree to this procedure after this discussion has taken place. You should be given written information, including this leaflet, and have the opportunity to discuss it with your doctor before making your decision.

NICE has also decided that more information is needed about this procedure. Your doctor may ask you if details of your procedure can be used to help collect more information about this procedure. Your doctor will give you more information about this.

You may want to ask the questions below

- What does the procedure involve?
- What are the benefits I might get?
- How good are my chances of getting those benefits? Could having the procedure make me feel worse?
- Are there alternative procedures?
- What are the risks of the procedure?
- Are the risks minor or serious? How likely are they to happen?
- What care will I need after the operation?
- What happens if something goes wrong?
- What may happen if I don't have the procedure?

How well does the procedure work?

In an analysis reviewing 47 studies involving 4500 patients whose primary cancer was colorectal who had the procedure, 16 studies reported that on average, 19% of patients were alive after 5 years. A study of 506 patients whose primary cancer was colorectal showed that patients survived for an average of about 20 months after the procedure.

A study of 96 patients (whose primary tumours were from various origins) showed that patients who had this procedure reported significantly improved quality of life when their progress was checked after 6 months using a questionnaire.

As well as looking at these studies, NICE also asked expert advisers for their views. These advisers are clinical specialists in this field of medicine. The advisers said that success factors are survival, quality of life, relief of symptoms, tumour recurrence rate, problems caused by the procedure and return to work and usual daily activities.

You might decide to have this procedure, to have a different procedure, or not to have a procedure at all.

Risks and possible problems

In the analysis of 4500 patients, 4 studies indicated that patients were more likely to survive if they had cytoreduction surgery followed by intraperitoneal chemotherapy (either during the procedure or shortly afterwards).

In the study of 506 patients and a study of 105 patients, 24 died (9 from septic shock, 5 from breathing problems, 3 from an abdominal infection, 2 from a blood clot in the lung and 1 from each of: stroke, infection, kidney failure, other organ failure and unknown causes).

In 2 studies involving 329 patients, 1 had a heart attack and another had 'myocardial necrosis' which is damage to the heart muscle. In 2 studies involving 199 patients, 3 had acute kidney failure (2 were successfully treated and the other patient needed dialysis in critical care). A kidney condition known as haemolytic-uraemic syndrome occurred in 1 patient in a study of 122 patients.

As well as looking at these studies, NICE also asked expert advisers for their views. These advisers are clinical specialists in this field of medicine. The advisers said that possible problems are bowel blockage, bleeding, abdominal pain, eating disturbances, injury to the circulatory system, urinary system or bile duct, liver problems or liver failure, nerve damage and severe allergic reaction (anaphylaxis).

More information about peritoneal carcinomatosis

Your local patient advice and liaison service (usually known as PALS) may also be able to give you further information and support. For details of all NICE guidance about cancer, visit our website at www.nice.org.uk

About NICE

NICE produces guidance (advice) for the NHS about preventing, diagnosing and treating different medical conditions. The guidance is written by independent experts including healthcare professionals and people representing patients and carers. They consider how well an interventional procedure works and how safe it is, and ask the opinions of expert advisers. Interventional procedures guidance applies to the whole of the NHS in England, Wales, Scotland and Northern Ireland. Staff working in the NHS are expected to follow this guidance.

To find out more about NICE, its work and how it reaches decisions, see www.nice.org.uk/aboutguidance

This leaflet is about 'cytoreduction surgery followed by hyperthermic intraoperative peritoneal chemotherapy for peritoneal carcinomatosis'. This leaflet and the full guidance aimed at healthcare professionals are available at www.nice.org.uk/guidance/IPG331

You can order printed copies of this leaflet from NICE publications (phone 0845 003 7783 or email publications@nice.org.uk and quote reference N2097). The NICE website has a screen reader service called Browsealoud, which allows you to listen to our guidance. Click on the Browsealoud logo on the NICE website to use this service.

We encourage voluntary organisations, NHS organisations and clinicians to use text from this booklet in their own information about this procedure.