

Metastatic breast cance in the liver



Two and a half years after being diagnosed with secondaries in the liver I am still working full-time, running a household, being a wife and, a kinship carer to my 15-year-old niece and squeezing in days to have my chemo. I have my bad tired days but I try to lead as normal a life as I can. – Michelle

This booklet is for people who have been diagnosed with metastatic breast cancer in the liver. It is designed to be read in conjunction with the *Information Guide* included in *Hope & Hurdles* and the systemic treatment booklet relevant to your 'subtype' of breast cancer. The three subtypes of breast cancer described are hormone receptor positive (with oestrogen and/or progesterone receptors) HER2-positive (with over-expression of HER2 receptors) and triple negative (none of these receptors present).

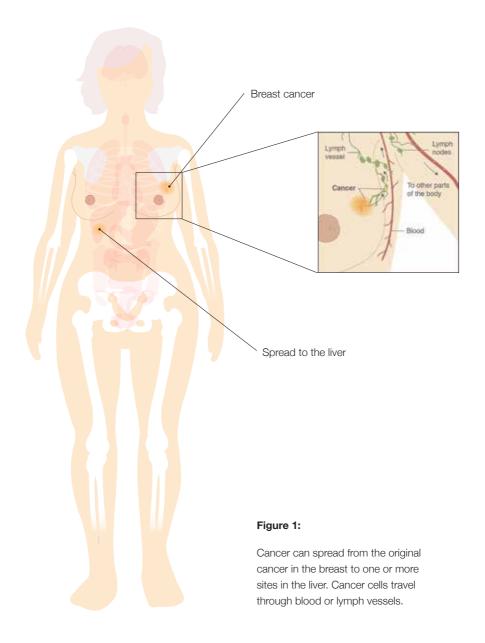
If you have been diagnosed with metastatic breast cancer in the liver, it means that breast cancer cells have travelled from the original tumour in your breast to one or more sites in your liver. These cancer deposits are called liver metastases or secondaries.

This is not the same as having cancer that starts in the liver; this is still breast cancer and treatments used are breast cancer treatments.

The diagram opposite shows breast cancer that has spread from the breast to the liver (figure 1).

Other sites to which breast cancer can spread include bones, lungs and, less frequently, the brain. Booklets on these types of metastatic breast cancer can also be ordered with *Hope & Hurdles* (see back cover).

Metastatic breast cancer in the liver can be treated and may be controlled for long periods of time. While it can't be cured, people with liver metastases may live for years and enjoy a good quality of life.



What happens in the liver?

The liver is the body's largest internal organ and is located on the upper right side of the abdomen, just under the ribs. It has several functions:

- it produces bile that helps the body digest food
- it is involved in the control of metabolism (converting food to energy), fluid balance and blood clotting
- it metabolises (breaks down) and clears from the body potentially harmful substances including medications, alcohol and other toxins.

Symptoms of metastatic breast cancer in the liver

The effects of metastatic breast cancer in the liver can vary greatly from person to person so it's important to keep in mind that not everything mentioned in this booklet may apply to you. In addition to reading this booklet, you should talk to your medical team about your situation and what you might expect.

Many people with metastatic breast cancer in the liver have no symptoms and the liver involvement is only detected on scans. If symptoms do occur they can range from mild to severe, depending on how much of the liver is affected and other health issues you may have. You may have some or very few of the symptoms described. You should always tell your treating team about any symptoms you experience. Most symptoms can be managed and many respond quickly to treatment (see page 15 for more information about managing symptoms).

Common symptoms

Nausea

Nausea is one of the most common symptoms of liver metastases and may be due simply to the cancer affecting the liver's ability to function properly. In addition, if your liver enlarges as a result of the cancer it may cause you to feel nauseated and easily over-full by putting pressure on your stomach.

Loss of appetite and weight loss

Loss of appetite and weight loss are also common symptoms. If your liver is enlarged and pressing on your stomach it may cause a feeling of fullness that worsens your poor appetite.

Tiredness and fatigue

Tiredness and fatigue are common symptoms of breast cancer and especially of liver metastases. These symptoms are mainly a general effect of the cancer itself, although poor nutrition and weight loss as a result of a poor appetite may contribute.

Pain

Metastatic breast cancer can enlarge the liver and stretch the capsule surrounding it, which may cause pain. This may feel like a dragging sensation or heaviness across the upper right abdomen or under the ribs on the right side of your body especially when you are bending forwards. Sometimes, pain can be felt in the right shoulder due to the enlarged liver irritating the diaphragm. The nerves that sense the pain in the diaphragm are connected to the nerves that go to the shoulder. This is called 'referred' pain. It does not mean that there is anything wrong with the shoulder.

Anaemia

Anaemia is the word used to describe a drop in the number of red blood cells circulating in the blood. It can be caused by not making enough blood cells in the bone marrow, iron deficiency or other reasons that you can discuss with your doctor. It can cause symptoms such as tiredness but can also be picked up through a routine blood test. If the anaemia is a result of low iron, this should be treated with iron tablets. However, this is not usually the cause of anaemia in patients with metastatic breast cancer and will more likely require a blood transfusion.

Bruising

Metastatic breast cancer in the liver can affect how well your blood clots, so you may bruise after just a small bump or sometimes without any obvious cause.

Uncommon symptoms

Hiccups

If the liver is enlarged and pressing on the diaphragm, it can cause the diaphragm to spasm, which results in hiccups.

Jaundice

Jaundice is due to a build-up of bile or bilirubin in the blood. This causes the skin and whites of the eyes to turn yellow and the urine to become dark. There are several reasons that jaundice might occur with metastatic breast cancer.

- If cancer cells block the ducts that carry bile out of the liver and into the intestine, bile can build up in the blood and cause jaundice. In this case the stools may also become pale. The build-up of bile irritates the skin and can cause itching.
- If the cancer cells in the liver have damaged the liver, its function may be reduced and jaundice may occur.

 Jaundice occasionally occurs due to reasons other than the cancer in the liver. For example a drug may cause liver damage, or breakdown of large numbers of red blood cells (haemolysis) may result in a high level of bilirubin from the broken blood cells.

Ascites

Ascites is an excessive build-up of fluid inside the abdomen in the space between the bowel loops, which causes the abdomen to swell. This can be uncomfortable and can increase constipation, nausea and loss of appetite.

Diagnosing metastatic breast cancer in the liver

If you develop any symptoms that suggest metastatic breast cancer in the liver, your doctor will carry out a physical examination and may order tests to determine whether the breast cancer has spread to the liver. If your liver is enlarged, your doctor may be able to feel this during the examination; it may also be tender.

The tests will depend on your symptoms. They may include the following.

Blood tests

A check of your liver function, clotting function and blood count. Tumour marker blood tests may also be helpful (CEA and CA15-3).

Tumour markers: Tumour markers are substances, usually proteins such as CA15-3 and CEA, which are produced by the body in response to cancer or by the cancer tissue itself. If the levels are higher than normal this can help to determine whether metastases are present. However, they are most frequently used to determine whether or not the cancer is responding to treatment. It is important to remember that tumour markers are not always reliable – for example, your tumour markers may increase even though there is other evidence that the cancer is responding to treatment – and some breast cancers don't produce tumour markers at all. Some medical oncologists don't use tumour markers for these reasons. Others use them as just one of a number of measures to help determine whether the cancer is responding to treatment.

Ultrasound scan

Ultrasound uses sound waves to build up a picture of the liver. It is painless and usually takes less than 30 minutes.

CT/CAT scan

Computerised tomography (CT) uses X-rays to build up a three-dimensional picture of the liver. Before the scan, you may need to fast and drink a contrast solution. A contrast material may also be injected into a vein, usually in the arm, before the scan. Your kidney function may need to be checked through a blood test before deciding if the contrast can be given. Contrast helps to show any cancer deposits more clearly on the scan. Let your doctor know if you are allergic to iodine or seafood. The scan itself is painless but you need to lie very still for approximately 30 minutes.

MRI scan

Magnetic resonance imaging (MRI) uses magnetic waves to scan your liver. It provides very detailed cross-sectional views and is particularly useful for showing any blockage in the bile duct. An MRI is not painful but it does require you to lie still in a cylinder for 30–45 minutes. Let your doctor know if you have claustrophobia. You may be given an intravenous injection of contrast material prior to the scan to help show any cancer deposits more clearly. Your kidney function may need to be checked through a blood test arranged by your oncologist before deciding if the contrast can be given.

The MRI machine is noisy and you may be given headphones with music to wear while you're having your scan. You may be able to take your own music if you prefer. MRI is not performed if you have any metal in your body, for instance a cardiac pacemaker or a breast tissue expander with a magnetic port. You will also need to remove any metal jewellery or other removable metal objects, e.g. piercings, before having an MRI.

MRCP

Magnetic resonance cholangiopancreatography (MRCP) is a special type of MRI that can be used to take specific pictures of the bile ducts to identify blockages.

ERCP

Endoscopic retrograde cholangiopancreatography (ERCP) is a procedure that shows if the bile duct is blocked. You may have an ERCP if you are jaundiced. A narrow flexible tube with a light on the end (endoscope) is passed through your mouth and stomach into the intestine then inserted into the bile duct where it joins the intestine. A dye is inserted through the tube and a series of X-rays show the movement of the dye through the duct. This test is normally done as a day procedure in a hospital radiology department. You will be sedated so that you're drowsy while the test is performed and you will need to fast for several hours beforehand.

PET scan

Positron emission tomography (PET) uses the detection of gamma rays (radioactive waves similar to those used in bone scans) to create a three-dimensional picture of your body. You will require an injection of radioactive material 90 minutes before the scan. PET scans can be useful in determining whether or not abnormalities seen on a CT scan are cancer, however they are not commonly used as they are not covered by Medicare.

PTC

Percutaneous transhepatic cholangiopancreatography (PTC) is a procedure used sometimes when it is not possible to perform an ERCP or the area of liver involvement is very close to the skin.

Local anaesthetic is used to numb the skin over the liver and a needle is introduced to inject a coloured dye. X-rays taken of the liver will show the bile ducts and identify blockages.

Liver biopsy

If any of the diagnostic tests (ultrasound, CT or MRI) find tumours, you will most likely be recommended to have a liver biopsy to determine whether or not these are metastases from breast cancer. It is also useful for your doctor to re¬check the receptors (ER, PR and HER2) as these can be different from your primary breast cancer and they're important in determining the best treatments for you. Liver biopsies are performed in a hospital radiology department under local anaesthetic using either ultrasound or a CT scan for guidance.

Other tests

The presence of metastases in the liver indicates that the breast cancer has spread from your breast into your body via the blood stream. Other parts of your body may also be affected, so your doctor will recommend other tests. These tests are called 'staging' tests and will provide a more accurate picture of the extent of spread of the cancer so that treatment recommendations can be made. The number and type of tests advised will depend on your symptoms, the results of a clinical examination and your general health and wellbeing.

Treating metastatic breast cancer

The overall aim of treatment for metastatic breast cancer is to control the cancer for as long as possible and ensure the best possible quality of life with control of symptoms. This is done by regularly assessing the activity of the cancer and any problems it is causing, and treating accordingly. This means you may require regular blood tests and scans.

Anti-cancer treatments are generally used in sequence, sometimes with breaks between them when no treatment is required. For instance, for women with hormone positive breast cancer (ER+ and/or PR+), a hormone treatment is used until it is no longer working and then a new treatment, often a different hormone treatment, is used.

Chemotherapy may be given for a short period of weeks to months, or continued indefinitely until the cancer starts to grow again. Ongoing chemotherapy needs to be balanced against the side effects of treatment; if you have a problem with side effects, or have a special occasion or holiday coming up, you may be able to take a break from treatment.

For information about taking a break from treatment, see the 'Treatment and side effects' section of the *Hope & Hurdles Information Guide*).

Treating metastatic breast cancer in the liver

Treatments for liver metastases are often very effective at stopping the growth and/or decreasing the size of the cancer deposits in the liver. The treatments recommended for you will depend on:

- your symptoms
- whether there is any blockage to your bile ducts
- whether your liver function is affected
- whether there is cancer in other parts of the body
- how many liver metastases there are
- the pathology of the cancer (for instance, whether it is ER, PR, or HER2 receptor positive)
- the treatments you have had in the past ۲
- your general health
- your personal preferences.

Your treatment may be managed by a multidisciplinary team and you will probably see a number of different health professionals at different times. These could include any or all of the following:

- medical oncologist
- radiation oncologist
- surgeon
- palliative care physician
- GP

- breast care nurse
- oncology nurse
- psychologist •
- social worker
- dietitcian.
- gastroenterologist

Other health professionals who may be involved in your care include:

- a liver (hepatobiliary) surgeon if there is a possibility of localised treatment for your liver metastasis/metastases
- a radiologist or upper gastrointestinal surgeon if there is blockage to your bile ducts.

Treatment for metastatic breast cancer in the liver can help to relieve symptoms, improve liver function and delay progression of the liver metastases. There are two types of treatment for liver metastases:

- **systemic treatment**, which treats the whole body, e.g. chemotherapy and hormone therapy
- **local treatment**, which treats a single part of the body, e.g. surgery.

Systemic treatment

Treatment will depend on which drugs have been used previously, including when you were first treated for breast cancer, and whether your cancer is hormone receptor positive and/or HER2-positive, or triple negative. It will also be influenced by the extent of the liver metastases and whether other parts of your body are also affected by metastatic breast cancer. Often, but not always, chemotherapy is the recommended treatment, at least initially. If the cancer is minimal in extent, hormone receptor positive, and not causing a lot of symptoms, hormone treatment is occasionally used in the first instance.

Systemic treatments recommended for you will depend on the subtype of breast cancer you have. These include hormone therapies, chemotherapy and targeted therapies.

For information on systemic treatments see the *Hope & Hurdles* booklet on the subtype of breast cancer you have (hormone receptor positive, HER2-positive, triple negative).

Local treatment

Local treatment, such as surgery, can only be considered in very select cases where the spread of breast cancer to your liver is limited, and you are generally well. If there is one or a small number of metastases in one area of the liver and no cancer anywhere else in the body, your oncologist may consider localised treatment of the metastasis/ metastases. The liver is a large organ and can continue to function well if part of it is removed or destroyed. You would be referred to a liver surgeon to discuss these options.

Local treatment can be done in several ways:

- surgery (possibly laparoscopic) cutting out (resecting) the metastases
- application of extreme cold (cryosurgery) or heat (radiofrequency ablation) under ultrasound or CT scan guidance
- transarterial chemoembolization (TACE) injecting a gelatin sponge soaked in chemotherapy into the blood supply of a metastasis, which blocks the artery and starves the cancer cells of oxygen at the same time as poisoning them with chemotherapy, causing them to die
- selective internal radiotherapy treatment (SIRT) delivering microscopic radioactive spheres directly to the cancers via their blood supply (this treatment is not funded by Medicare but may be partially covered by your private health fund if you have private health insurance).

Managing the symptoms of metastatic breast cancer in the liver

Nausea

Nausea is managed with anti-nausea drugs called antiemetics. They can be taken in tablet form, as a suppository or by injection. There are several different antiemetics available. You may need to try several before you find the best one for you. Dexamethasone, a steroid medication, can also be very helpful in controlling nausea.

Other practical things you can do to manage nausea include having small, frequent meals, resting before and after eating, and avoiding fatty foods. Exercise can also help manage nausea as well as fatigue, so some gentle exercises may help you feel better.

Loss of appetite

If you have lost your appetite, it may help to eat small amounts often, rather than sit down to normal-sized meals. When your appetite is limited, taking nourishing drinks, such as Sustagen or homemade milkshakes, may also be easier than a normal meal. Your doctor may refer you to a dietitian for help. Nutritional supplements may be recommended if you are losing weight.

Fatigue

Gentle exercise, such as walking, can improve fatigue, but it is important to pace yourself and have adequate rest.

Anaemia can contribute to fatigue. If your doctor suspects that you may be anaemic, you will need blood tests, and a transfusion may be helpful.

Steroid medications, such as prednisolone or dexamethasone, can boost energy and appetite.

Pain

It is important to know that pain can almost always be controlled. The treatment for the cancer will usually help control any pain caused by the metastases in the liver. There are also many different pain relieving drugs (analgesics), which can be used singly or in combination.

Paracetamol is effective for mild pain and is most effective if you take it regularly rather than waiting until the pain returns or worsens. Anti-inflammatory medications such as aspirin and ibuprofen (Nurofen) are also effective for mild pain. Codeine-containing analgesics such as Panadeine and Panadeine Forte are effective for moderate pain while opioid-based (morphine related) drugs such as Oxycontin, Targin and Endone (containing oxycodone) and, MS Contin, or Kapanol (containing morphine) and Jurnista and Dilaudid (containing hydromorphone) can control more severe pain.

The opioid pain killers provide the backbone of managing moderate or more severe pain. There are quite a number of different versions of opioid pain killers, and new ones are introduced from time to time. The usual approach is to use a slow-release form – these are either oral medications or patches that are placed on the skin and renewed every few days.

Examples are:

- Oxycontin, Targin, MSContin, Jurnista (tablets)
- Fentanyl (Durogesic) patches.

You will also be able to take a dose of fast-acting (as opposed to slow-release) pain medication for what is called 'breakthrough pain' – pain that occurs despite the slow-release pain medication. Examples of these fast acting medications are:

- Endone, Dilaudid (tablets)
- Morphine mixture (liquid)
- Actiq (fentanyl lozenge)
- Abstral (fentanyl tablets).

The steroid medication dexamethasone can sometimes be very helpful for the pain associated with liver metastases.

It should be possible to achieve good control of your pain. It is very important for you to let your treatment team know if your pain is not well controlled as a change in dose or use of different drugs may be very helpful. Sometimes, your oncologist may suggest input from someone who specialises in cancer pain management (palliative care physicians usually provide this advice in a cancer treatment team).

Complementary therapies such as relaxation therapy, acupuncture, gentle massage and hot or cold packs may also be helpful.

Pain can also affect your sleep. If you are having trouble sleeping, make sure you raise this with your oncologist at your next appointment.

For more information on managing pain, see the 'Treatment and side effects' section of the *Hope & Hurdles Information Guide*.

Cancer Council has a free booklet and DVD *Overcoming cancer pain*, which provides information and strategies to help manage pain caused by cancer. You can order a copy by phoning 13 11 20 or download a PDF from your local Cancer Council website.

Ascites

A procedure called paracentesis may be used to drain excess fluid from the abdomen and relieve symptoms. A small tube is passed through the skin and into the abdomen under local anaesthetic. The procedure can be repeated if the fluid builds up again.

In some situations, when drainage has to be repeated frequently, a permanent or a semi-permanent tube with a tap can be placed to let the fluid out as often as necessary to relieve symptoms.

Jaundice

If the bile duct is blocked and you become jaundiced, a small tube, called a stent, can be inserted into the bile duct to drain the bile and relieve the jaundice. This is usually done internally via a gastroscopy, although where this is not possible, a stent can be placed through the skin, and may require the wearing of a bag over the stent to collect the bile.

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Jaundice can cause itching which may be worse at night or when you are hot.

It is important to avoid direct heat to the skin such as hot baths, heaters or excessive sunlight and to keep generally cool. Alcohol and spicy food may also aggravate the itch.

It may help to keep your skin well moisturised. If you store your moisturiser in the fridge the cold could be particularly soothing.

Liver function – medications and alcohol

The liver is the most important site in the body for metabolising and detoxifying drugs, including alcohol. If metastatic cancer reduces your liver function, your ability to break down medications and alcohol will also be impaired. It is very important that you discuss all medicines that you take, including vitamins and herbal products, with your doctor. This includes any complementary or alternative medications you are considering taking. Your doctor will also be able to give advice about safe levels of alcohol consumption.

Living with metastatic breast cancer in the liver

It is normal to experience a range of intense emotions when you find out that you have metastatic breast cancer in the liver. If you have been treated for early breast cancer, you may feel angry that the breast cancer has spread despite that treatment. There may be times when you feel isolated or overcome by fear, sadness, depression or anxiety. For many people, living with the uncertainty that comes with a diagnosis of metastatic breast cancer can be very difficult.

You may find you can cope with these feelings on your own or with support from family members and close friends. However, many people seek additional support and there are many places where you can find help. If you have one, your breast care nurse may be able to help you deal with some of these issues. Another good person to talk to is your GP, who can also refer you to a counsellor or psychologist. You'll find more information about finding support in the 'Living with metastatic breast cancer' chapter of the *Hope & Hurdles Information Guide*.

Breast Cancer Network Australia's online network (bcna.org.au) is an excellent place to find support from others with metastatic breast cancer. There is an active group on the network who will welcome you and answer any questions you may have. Many women tell us that they had never met another woman with metastatic breast cancer before joining the network, and that they found it a wonderful way to connect with others and share their experiences.

More information

Breast Cancer Network Australia

bcna.org.au 1800 500 258

In addition to *Hope & Hurdles* — BCNA's key information resource for people affected by metastatic breast cancer – BCNA produces a range of fact sheets and booklets on specific topics. These are available to order or download from BCNA's website bcna.org.au.

BCNA's telephone counselling service provides one-on-one telephone counselling support to women and men with metastatic breast cancer, their families and supporters. Phone 1800 500 258 for more information or to make an appointment.

BCNA's Helpline provides support and information about breast cancer and is available Monday to Friday from 9.00 am to 5.00 pm. You can phone 1800 500 258 or email beacon@bcna.org.au.

The metastatic breast cancer section of BCNA's website is regularly updated as new information becomes available. Visit bcna.org.au.

The Inside Story (supplement to BCNA's *The Beacon* magazine) has information and stories specifically for people diagnosed with metastatic breast cancer.

More information

Breast Cancer Network Australia

bcna.org.au 1800 500 258

More information is available in the Hope & Hurdles Information Guide and in the Hope & Hurdles booklets:

- Metastatic breast cancer in the bone
- Metastatic breast cancer in the lung
- Metastatic breast cancer in the brain
- Hormone receptor positive metastatic breast cancer
- HER2-positive metastatic breast cancer
- Triple negative metastatic breast cancer
- Planning ahead (formerly called Getting your affairs in order)



About Breast Cancer Network Australia

Breast Cancer Network Australia (BCNA) is the peak national organisation for Australians personally affected by breast cancer. We work to ensure that people diagnosed with breast cancer and their families receive the very best support, information, treatment and care, possible.



bcna.org.au beacon@bcna.org.au 1800 500 258