

Metastatic Spinal Cord Compression (MSCC)

Cancer Services

If you have been admitted to hospital with suspected spinal cord compression, this leaflet will help you to understand what will happen during your hospital stay.

What is Metastatic Spinal Cord compression (MSCC)?

The spinal cord is a bundle of nerves that runs from the brain down the back carrying messages to all of the structures and organs in the body. It is a very fragile structure and is mostly protected by the bones within the spine.

MSCC occurs when cancer cells grow in or near the bones in the spine. This is usually a "secondary" cancer site or "metastasis" which means cells from your original cancer have travelled in your body to another place, the bone.

Unfortunately, for a small group of people this may be the first time you have been told that we suspect you have cancer as you have not been previously diagnosed and this is a really stressful time.

When you have metastases in the spine, the spine can become weak by the growing cancer and the bone collapses onto the spinal cord or the cancer itself can grow into the space where the spinal cord is squashing the nerves, stopping vital messages from the brain getting to their intended destination. Swelling occurs at the damaged area increasing the risk of nerve damage and as a result there is a reduced blood supply to the spinal cord.

If this situation is untreated or there is a delay in treatment, it can lead to irreversible damage to the spinal cord and the messages from the brain can no longer get to where they were intended for, leading to permanent paralysis.

Early diagnosis and treatment gives the best chance of preventing permanent damage.

What happens next?

A doctor will need to examine you and he/she will want to know about your symptoms, especially any pain you may be experiencing. They will perform a "neurological examination" which means doing a number of tests to assess how well you are moving your limbs and if you can feel certain areas of your body. They will also want to ask you some personal questions about your bowel and bladder function and in some cases; they may want to examine your anal tone (back passage) to assess if the muscle is working properly.

If the doctor suspects you may have spinal cord compression, you will be asked to lie flat on your back. This is similar to when people, involved in a car accident, are routinely placed in a neck brace and lay flat on a spinal board to protect an unconfirmed spinal injury. Likewise, the reason we are

The prevention of infection is a major priority in all healthcare and everyone has a part to play.

- Please decontaminate your hands frequently for 20 seconds using soap and water or alcohol gel if available
- If you have symptoms of diarrhoea and/or vomiting, cough or other respiratory symptoms, a temperature or any loss of taste or smell please do not visit the hospital or any other care facility and seek advice from 111
- Keep the environment clean and tidy
- Let's work together to keep infections out of our hospitals and care homes.

doing this is because we don't know to what extent your spine is affected at this point, if at all, and we need to protect your spinal cord from any unnecessary movement while we do further tests to assess you.

The test we will need to do is called an MRI scan (Magnetic Resonance Imaging). There is more detailed information about this further on in the leaflet. However, not everyone can have an MRI scan, so if you know you have a metal implant fitted, such as a pacemaker or other types of internal metal work like clips, metal plating etc. please tell us before having this test. It is also important to let us know if you suffer from claustrophobia as the test involves being in an enclosed space. If you are not able to have an MRI for some reason, there are alternative tests we can do, so please do not worry. We expect to get your MRI scan completed within 24 hours of you being admitted to hospital.

You will be prescribed steroids (usually Dexamethasone). These drugs help to reduce local swelling and pressure around the affected area. If you are diabetic, or have had problems with steroids in the past, please let us know.

You may also be given a daily injection of low molecule weight heparin (usually Clexane); this is a blood thinning drug to help to prevent blood clots from occurring while you are restricted to bed rest or immobile.

One of the most important things is for you to be comfortable and, as many people with this condition experience pain, it is vital that we attempt to control this quickly. You will be given Analgesia if you are in pain and we need you to tell us how effective this is. We DO NOT want you to be having tests or treatment and be uncomfortable, so please help us help you.

What is an MRI scan?

Magnetic resonance imaging (MRI) is a type of scan that uses strong magnetic fields and radio waves to produce detailed images of the inside of the body. An MRI scanner is a large tube that contains powerful magnets. You lie inside the tube during the scan. The MRI scanner is operated by a radiographer. They control the scanner using a computer, which is in a different room to keep it away from the magnetic field generated by the scanner. You will be able to talk to the radiographer through an intercom and they will be able to see you on a television monitor throughout the scan. At certain times during the scan, the scanner will make loud tapping noises. You will be given earplugs or headphones to wear. It is very important that you keep as still as possible during your MRI scan. The scan will last between 15 and 90 minutes, depending on the size of the area being scanned and how many images are taken. An MRI scan is a painless and safe procedure.

What happens after my MRI scan?

We usually get a written report following an urgent MRI scan within hours of the test being performed. Therefore, when you return to the ward after the procedure your doctors and nurses may still not know the results for a short time. Be assured someone will be looking out for it.

If your MRI scan is "negative or clear", which means there are no concerning features you will be given advice on how and when to recommence normal activities by your doctors and or physiotherapist. More often than not, you will be discharged on the same day.

If your MRI scan identifies a problem then there are a number of treatment options to consider. We will need to discuss what the best treatment for you is and this will depend upon a number of factors:-

- The type of cancer you have
- What part/s of the spine are affected and the extent of the damage
- Your general health
- Your wishes – these choices aren't always straightforward and we need your help to do the right thing

The following paragraph discusses all of the treatment options available at The Royal Wolverhampton NHS Trust. However, when considering the factors that influence treatment choice as stated above, it may be that not all will be appropriate to use all of the time. You and your doctor

should agree a treatment plan that gives you the best outcome for your situation and it may not include all of the options below.

So what are the treatment options?

Surgery

The Royal Wolverhampton NHS Trust currently does not have a Specialist Spinal Surgical Service within the hospital grounds. This is an extremely specialised service of which there are a few specialist centres within the UK. We have successfully worked with the spinal team at The Robert Jones and Agnes Hunt Hospital in Oswestry for a number of years as this hospital is a renowned centre of excellence for Spinal Surgery.

If spinal surgery is a reasonable treatment option for you, you will need to agree to be transferred to them for a short period of time. This means you will travel by ambulance from New Cross Hospital to Oswestry and stay there for a few days to have your operation.

Once your operation or procedure is complete and you are fit to travel back, you will return to us at the earliest convenience to rehabilitate and prepare for discharge.

We understand being transferred to another hospital is very stressful and when this happens you can be on the move in a very short period of time. This means sometimes you are transferred without the support of your loved ones being with you.

We appreciate it feels like we do not consider your loved ones' feelings in these decisions and we know that many would like to travel with you but these situations are urgent and we do not always have the time to wait for families and friends to get to hospital to go with you.

We apologise for this and at no time should you be transferred without your family/friends being notified, given advice on visiting times and directions of how to find you. A separate leaflet is available with this information; please ask if you do not have a copy.

Below is a list of surgical techniques to treatment MSCC. It is not unusual that the Spinal Surgeons to use one or more approaches, again this will be explained to you should it be appropriate to do so:-

- To remove some or all of the cancer from pressing onto the spinal cord, this is called "decompression of the spinal cord"
- To strengthen damaged bone preventing further fracture or collapse by using techniques such as injecting a "cement" like substance or inserting a balloon into the damaged bone
- To "fix" the affected spinal bones in place preventing unwanted movement and by doing so protect the cord from being crushed by unstable bone. This is a major operation as the spinal surgeons attach surgical screws, pins and /or a metal frame to the affected bone and some of the neighbouring healthier bone

Radiotherapy

Radiotherapy is the use of high-energy rays to destroy cancer cells and is another effective way to treat MSCC. It can be used on its own, or following surgery.

It is given by directing high energy X-rays, at the cancer growth from outside the body. This is known as external beam radiotherapy. Radiotherapy is usually given as a short course of treatment. This can range from one single treatment to one treatment a day for five days.

If surgery is not an appropriate treatment option initially we usually start Radiotherapy treatment on the same day this decision is taken. However, if you have had surgery we like to give your surgery scar/s a little time to heal before commencing this treatment as it can delay wound healing and slow your surgical recovery.

Radiotherapy is used as an effective treatment to help control pain and other symptoms MSCC causes.

Chemotherapy

Chemotherapy may be considered as a treatment option in specific cases but this is uncommon. Chemotherapy is the use of anti-cancer (cytotoxic) drugs to destroy cancer cells. It may be used for cancers that are very sensitive to chemotherapy, such as lymphoma. However, it is used after radiotherapy/surgery for certain cancers, such as breast and prostate cancers.

Best Supportive Care

All of the treatment options discussed above have a degree of risk attached to them. Sometimes treating this condition in the ways described above is not the right thing to do. There are a number of reasons why this may be the case.

Firstly, the person who requires treatment may not be fit enough to cope with the associated risks and/or side effects. Having these treatments may cause them greater harm or even be detrimental to their life expectancy.

Secondly, this may not be the first time you have experienced a spinal cord compression and may have been treated with the above treatments before. In a small group of people if the problem reoccurs at the same place in a short period of time we may be unable to safely retreat again.

When the above treatment options are not available we manage the situation with what we consider best supportive care. This means we use techniques to control or relieve complications such as pain and disability to improve your comfort and quality of life.

What is Spinal Stability and how will this affect me?

As we have said, if the bones in your spine have collapsed or are damaged by the cancer growing within them, the arrangement of your spinal bones can be affected and/or move unpredictably. We know this can cause damage to the spinal cord but it can also cause severe and chronic pain even after some treatments.

One of the reasons for involving the Spinal Surgical team is so that they can stabilise your spine surgical techniques. These are called internal stabilisation procedures. However, if surgery is not an option other methods can be considered.

External fixation devices are garments that can be worn to support the spine on a day to day basis. There are a number of different devices we can use but the most common ones are "braces" and "collars".

Brace - Try to visualise something that looks similar to a Victorian corset. These devices are worn to protect and support the spine around the chest, mid and lower back depending upon where the damage is.

Collar - If your neck or the top of the (cervical) spine is affected, you may also need to wear a surgical collar similar to those used when people have car accidents.

We usually get advice about these devices from our specialist Physiotherapy team and Orthotics department. The device will be specially fitted to you for your needs. For this reason, it may take a few days for your device to be fitted.

If I am restricted to bed rest what should I expect?

While you are asked to remain on bed rest you will be expected to lie completely flat. This means you can NOT sit up or get out of bed during this time. This includes meals times, hygiene needs, toilet requirements and/or entertainment. This will continue until a treatment plan is decided and implemented and you will be told when it is safe to move. This may be for a few days. During this time, you will be supported to carry out your daily activities by the nursing staff looking after you.

Some people may not be able to tolerate lying completely flat for a number of reasons. Do not worry if this is you, we will adapt this request to your individual needs.

While on bed rest you will be supported with all activities of daily living. These will include:-

- **Moving while in bed** – while on bed rest your movement will be restricted. You will be asked to refrain from twisting your spine even when lying down, but we know you will need to move at times.
There are specific techniques health care practitioners (HCP) are trained to move people with a confirmed or suspected spinal injury like spinal cord compression. One of the ways you can be moved is called the “Log Rolling Technique.”
This involves a number of HCPs (usually three to four depending upon your size) standing in line all to one side of you. One person supports your head and neck and others position themselves at critical points along your body. When you are ready to be moved, all of the HCPs move you like a “log” in one motion ensure your spine stays in alignment. This minimised the risk of damage to your cord by movement.
- **Pressure area care and pressure relief** – there is a risk when you are expected to lie flat for some time that the bony areas on your body may become sore and the skin covering this break down resulting in “bed sores”. It is vital that we prevent this where possible.
It is important that your bed linen and/or nightwear are not ruffled underneath you causing pressure. Having clean and dry skin is essential to reduce the risk, so it is vital to maintaining your hygiene requirements. Do not be tempted to leave having a wash on the assumption you will be back on your feet soon; this might not be the case. If your bedding becomes soiled or wet let the nursing staff know immediately.
You will be given assistance by your nurses. They are required to inspect your pressure areas and help to re-position you every two hours. However, if you are uncomfortable between these times, please ask for help.
Unfortunately, for most cases specialist hospital pressure relieving air mattresses cannot be used as this can affect spinal alignment and can be a risk to an unstable spine.
- **Hygiene needs** – Feeling clean and fresh is vitally important for your well-being at this time and you will need assistance at least on a daily basis, if not more depending upon your normal routine. Do not be embarrassed to ask for help from the nursing staff, this is what they are there to do.
Alternatively, if you would prefer to have a member of your family help you please speak to the nursing staff, we are happy to accommodate these requests where possible.
- **Elimination needs** – Toileting needs can be a very personal issue for some people and create a number of difficulties when bed rest restrictions are in place. You will NOT be allowed to get out of bed to use a toilet or even a commode until it is safe to do so. You will be expected to use a bed pan and urinal bottles (men). We understand how distressing and embarrassing this can be for most people.
We would encourage you to bring in your own hygienic wipes, hand gel/cream and mild air perfume dispensers if this helps. Though you should always be assisted by the nursing to freshen up and clean your hands after using these aids.
Please ask for urinal bottles to be taken away from the bed space at the time they have been used. We do not find it acceptable to have used urinal bottles left on bed tables where food and drinks are likely to be placed.
- **Pain control** – As we have stated before one of the most important things is for you to be comfortable and as many people with this condition experience pain it is vital that we attempt to control this quickly. You will be given Analgesia if you are in pain and we need you to tell us how effective this is. Please ask the nursing staff for analgesia when you require it. It is easy to wait for the next drug round but that is not always the best option to control your pain.
- **Dietary needs** - Eating and drinking can be difficult when lying flat. We advise that you choose to eat foods that can be handled with your hands (finger foods) or easily on a fork. Here are some suggestions you might like to try; sandwiches, crisps, biscuits, chips, fish fingers, pastries, sausage rolls etc. We appreciate these do not sound particularly healthy options but we hope this will be short term.

There are sandwich boxes available which include sandwich fruit, crisps and a drink. Please ask our staff for further information. If you have any favourite foods that you may like to eat from home, speak to the nursing staff. It may be possible for them to be brought in for you. You will require assistance when eating at this time, so please do not be embarrassed to ask. The nurses are here to help you.

Drinks can be a notoriously difficult experience when lying flat. It is vital that you continue to drink at least 2000mls of fluid per day (unless there are other medical reasons to restrict this). We advise you to use a straw or a beaker and these are available on our wards so again please ask if they have not been offered.

- **Psychological and Spiritual support** - we understand this is a stressful, frightening and difficult time.
You may feel you need someone away from your family and/or health care team to talk too. There are many support services available to you including our Psychology team, Palliative Care Nurses and Chaplain Service. If you think that this may help please do not hesitate to seek this support by speaking to your nurses.
- **Exercise and Rehabilitation** - You will also be introduced to a specialist Physiotherapist. These are a team of health care professionals who specialise in maximising human movement and function. They will play a large role to support you during your hospital stay specifically during your recovery from treatment, rehabilitation and discharge planning. Sometimes your doctor may say that it is safe for you to move from flat bed rest. We always advise that this decision is taken with the support of your physiotherapist as they are best placed to advise and support you on moving after these events.

If you have any further questions, please do not hesitate to ask.

English

If you need information in another way like easy read or a different language please let us know.

If you need an interpreter or assistance please let us know.

Lithuanian

Jeigu norėtumėte, kad informacija jums būtų pateikta kitu būdu, pavyzdžiui, supaprastinta forma ar kita kalba, prašome mums apie tai pranešti.

Jeigu jums reikia vertėjo ar kitos pagalbos, prašome mums apie tai pranešti.

Polish

Jeżeli chcieliby Państwo otrzymać te informacje w innej postaci, na przykład w wersji łatwej do czytania lub w innym języku, prosimy powiedzieć nam o tym.

Prosimy poinformować nas również, jeżeli potrzebowaliby Państwo usługi tłumaczenia ustnego lub innej pomocy.

Punjabi

ਜੇ ਤੁਹਾਨੂੰ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਰੂਪ ਵਿਚ, ਜਿਵੇਂ ਪੜ੍ਹਨ ਵਿਚ ਆਸਾਨ ਰੂਪ ਜਾਂ ਕਿਸੇ ਦੂਜੀ ਭਾਸ਼ਾ ਵਿਚ, ਚਾਹੀਦੀ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

ਜੇ ਤੁਹਾਨੂੰ ਦੁਭਾਸ਼ੀਏ ਦੀ ਜਾਂ ਸਹਾਇਤਾ ਦੀ ਲੋੜ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

Romanian

Dacă aveți nevoie de informații în alt format, ca de exemplu caractere ușor de citit sau altă limbă, vă rugăm să ne informați.

Dacă aveți nevoie de un interpret sau de asistență, vă rugăm să ne informați.

Traditional Chinese

如果您需要以其他方式了解信息，如易读或其他语种，请告诉我们。

如果您需要口译人员或帮助，请告诉我们。