

STANDARD OPERATING PROCEDURE (SOP) FOR THE MANAGEMENT OF PATIENTS WITH METASTATIC SPINAL CORD COMPRESSION (MSCC) WITHIN THE CHRISTIE

Procedure reference:	CP80	Version:	V08	
Accountable co owner):	mmittee (document	Networked services divisional governance committee		
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Ratified by (if applicable):	Document Ratification Committee	Date ratified (if applicable):	26 September 2024	
Parent policy	Manchester Cancer Network MSCC Pathway and Guidelines - www.christie.nhs.uk/MSCC			
Other associated policies (if applicable)				
Target audience: All clinical staff				



Document name: SOP for the management of patients with metastatic spinal cord

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STATEMENT OF INTENT	To provide patients who have a suspicion of or confirmed metastatic spinal cord compression (MSCC) with timely and excellent care according to the Cancer Alliance and Christie MSCC pathway and guidelines.
PURPOSE OF SOP	To ensure patients who present at the Christie or to the Christie with a suspicion of or confirmed MSCC receive urgent clinical examination, investigations and treatment in line with the NICE guidelines (2023), the Manchester Cancer MSCC pathway and Guidelines and the Christie internal MSCC pathway . Early recognition of signs and symptoms, urgent diagnosis and treatment will achieve favourable outcomes, i.e. patient maintains quality of life and function and life expectancy is improved.
SCOPE	All Christie clinical staff
AUTHORISED PERSONNEL / TRAINING REQUIRED	All Christie clinical staff must be aware of the signs and symptoms of MSCC and be aware of the internal pathway and where to find this. For education and training requirements contact the MSCC service.
REFERENCES (if applicable)	 Manchester Cancer MSCC webpage (including Network pathway and guidelines) – Metastatic Spinal Cord Compression (MSCC) Coordinator Service (christie.nhs.uk) (Accessed 23 September 2024). National Institute for Health and Care Excellence [NICE]. (2023). Spinal metastases and metastatic spinal cord compression. Retrieved from https://www.nice.org.uk/guidance/ng234/resources/spinal-metastases-and-metastatic-spinal-cord-compression-pdf-66143896133317 (Accessed 23 September 2024).

Document name: SOP for the management of patients with metastatic spinal cord compression (MSCC) within The Christie

Document Ref: CP80

1. Key timescales within the MSCC pathway

Suspicion of MSCC to MRI scan – must be within 24 hours.

MR scan to decision to treat (DTT) – as soon as possible. Definitive diagnosis may depend on further investigations.

DTT to treatment - must be within 24 hours.

2. Prior to any onset of MSCC

All 'at risk' patients (Primary cancer with or without known bone metastases) should be given the patient information leaflet: <u>Spinal Cord Compression 'What to look out for'</u> by a clinician. The contents must be explained to the patient face to face.

3. **Confirm diagnosis**

Patients on site at The Christie - Out Patients (OP) or In Patients (IP) with suspicion of MSCC:

- New and persistent localised back pain (especially thoracic), chest wall pain or other unexplained atypical pain
- Unilateral or bilateral nerve root pain, tingling, burning, shooting and bandlike around chest (radiates in dermatomal distribution)
- Pain on movement, coughing, sneezing, straining and lying flat
- Neurological signs may be equivocal. May report unsteadiness / heaviness in limbs, upper or lower limb weakness, reduced mobility
- Altered sensation with a sensory level
- Bladder and bowel abnormality, e.g. difficulty starting flow of urine / constipation / incontinence
- Saddle anaesthesia and sphincter disturbance (cauda equina lesion)

NB: Loss of power / mobility / sphincter problems = late signs of MSCC

If the patient is seen as an OP, follow immobilisation and spinal stability guidelines to determine if immobilisation is indicated and steroid guidelines for commencing dexamethasone. These can be found on the Manchester Cancer MSCC page: MSCC guidelines for healthcare professionals (christie.nhs.uk). Request emergency admission via CWP form. If bed available, liaise with Patient flow team for admission, request urgent Magnetic Resonance (MR) whole spine (see section below) on same day or within 24 hours of clinical suspicion.

If the patient is seen as an OP and there is no bed available, transfer patient to their local A&E via 999 ambulance. Call Accident & Emergency (A&E) with information regarding suspicion of MSCC and inform the local Acute Oncology team of the patient's transfer.

- If the patient is already an IP, arrange urgent clinical assessment by the treating team and if appropriate request urgent MR scan of the whole spine to be done within 24 hours (see section below).
- If the patient has had a recent Computerised tomography (CT) staging scan at The Christie for suspicion of bone metastases and this shows incidental

Document name: SOP for the management of patients with metastatic spinal cord compression (MSCC) within The Christie

Document Ref: CP80

finding of cord compression or high risk of cord compression, request urgent MR whole spine at The Christie to be performed within 24 hours.

 If the patient is at home with signs of MSCC, urgent ambulance and transfer to local A&E should take place. If treating consultant has specifically requested admission to The Christie, liaise with Patient flow team to ensure bed is available and request emergency admission via CWP form.

4. Management

Radiology: Referring clinician requests urgent MR scan via Christie Web Portal (CWP), see 'Patient Menu', under 'Referrals' – 'Request imaging'. The request form should state 'suspected MSCC' with a description of presenting signs and symptoms. This should be followed by a telephone call to the MR Department to make radiology aware.

Standard and agreed reporting timings: For a.m. sessions – report available by 13:00, for p.m. sessions – report available by 17:00. Where urgent information is required, reporting Radiologist can be contacted for verbal report prior to formal written report available.

Out of hours – MSCC slots are available Saturday and Sunday from 09:00 to 12:00. Patients with suspected MSCC who require urgent MR scan at the weekend should be discussed urgently in person by the referring consultant / MSCC coordinator and the on-call consultant radiologist.

The following sequences are required:

T1W sagittal

T2W sagittal

STIR sagittal

Transaxial imaging through focal lesions (either T1W or T2W)

If imaging confirms cord compression, during working hours, contact the MSCC coordinator or the Medical Oncology ST on-call or parent team ST for Clinical Oncology. Outside of working hours, ask switchboard to contact the Clinical Oncology ST directly – it is then their responsibility to update the referring team.

MSCC Coordinator: Contact via switch or the Alertive app to refer or for advice / assistance.

Steroids: Follow steroid guidelines for commencing dexamethasone. If indicated start Dexamethasone 16mg OD as initial loading dose with PPI cover for patients with neurological symptoms and/or severe pain. Subsequent days 8mg BD.

Immobilisation: Start immobilisation without delay (including for transfer to hospital) for patients with suspected or confirmed MSCC and neurological symptoms or signs suggesting instability (as per The Nice guidelines 2023) NB – if lying flat aggravates pain significantly, make comfortable by elevating head rest / or pillow and position at the lowest height that the patient can tolerate.

Admission to an Inpatient area:

Document name: SOP for the management of patients with metastatic spinal cord

compression (MSCC) within The Christie

Document Ref: CP80

- Admitting team: ST or ward doctor completes a thorough assessment with a full neurological examination including PR examination.
- Nursing staff: MSCC forms to be completed every shift. Forms available on CWP under forms: 'Spinal cord compression care'. Bowel care plans to be commenced on admission for all MSCC patients.
- Physiotherapy and Occupational Therapy: Patient to be referred on admission, via CWP referral form with information of ? MSCC or MSCC, or via Alertive app.

5. **Triaging and treatment**

No MSCC / Impending MSCC: If MR scan shows 'no' or 'impending' MSCC (neurology intact), inform treating team to ensure continued monitoring of signs/symptoms and management for any symptomatic spinal metastasis or impending MSCC. If symptoms persist or worsen, review patient urgently. If on-going problems with symptoms, refer to the Supportive Care Team (referral form on intranet), for urgent referrals, use the Alertive app.

Confirmed MSCC or Impending with a neurological deficit: (ESCC grade 1b/c with a neurological deficit, ESCC grade 2 or 3 regardless of symptoms) Contact the MSCC Coordinator in hours via switch or the Alertive app, or Clinical Oncology ST on-call out of hours to triage patient and decide a treatment plan. The following information is required:

- Date and time of MR scan or results of scan if already reported.
- History, including history of presenting complaint and past medical history.
- Full neurological assessment including PR examination.
- Mobility immediately prior to and on admission.
- · Performance status.
- Prognosis, if patient may be a surgical candidate.

Triage: the following 3 outcomes are possible:

- A. Clinical status and cancer prognosis require urgent surgical opinion.
- B. Clinical status and cancer prognosis indicate immediate radiotherapy.
- C. Clinical status and cancer prognosis indicate best supportive care only.
- If it is unclear if patient is a surgical candidate, or when prognosis is required, always discuss patient with the consultant on the parent team before referring to spinal surgical team. If patient has no histological diagnosis yet, but there is suspicion of a primary based on radiology, discuss with a consultant on that team that covers the geographical area where the patient lives.

NB: If surgical referral is indicated, the Spinal Team at Salford Royal (Northern Care Alliance Foundation Trust) should be contacted via the patient pass database (https://patientpass.srft.nhs.uk).

When a patient presents outside of working hours, the referring team and on-call clinical oncology ST / consultant discuss suitability for surgery including prognosis and ensure referral via patient pass database is completed without delay.

Document name: SOP for the management of patients with metastatic spinal cord compression (MSCC) within The Christie

Document Ref: CP80

While awaiting a surgical opinion or transfer to SRFT, immobilisation and dexamethasone should continue if they were initially indicated following the guidance in the immobilisation and steroid MSCC guideline documents (MSCC guidelines for healthcare professionals (christie.nhs.uk)) unless otherwise advised by the spinal team.

In some instances, the patient may be transferred to SRFT for assessment for suitability for surgery and if not suitable, will return to the Christie on the same day. The patient's bed at the Christie must therefore be kept for 24 hours on transfer to Salford.

- If surgery is not indicated and the patient is triaged to have radiotherapy, the on-call Clinical Oncology team and MSCC service will arrange urgent treatment within 24 hours of the treatment decision.
- If the patient is not suitable for any treatment and is for best supportive care, ensure referral to Supportive Care team and physiotherapy have been made.

6. **Spinal stability and re-mobilisation**

Re-mobilisation: Once the MR scan has been reported, and if 'confirmed' or 'impending' MSCC is diagnosed, a decision regarding spinal stability should take place at the earliest opportunity and is a joint decision by the clinical oncology ST, physiotherapist and with advice from radiology if required. This decision should also be discussed with the patient and their view taken into consideration. Refer to the immobilisation and spinal stability guidelines on the Christie MSCC webpage MSCC guidelines for healthcare professionals (christie.nhs.uk).

NB – This decision must be documented in the patient notes and on CWP.

Spinal team should not routinely be contacted for advice regarding stability; however, if a patient is deemed a surgical candidate and a referral for surgery has already been made, the spinal team are often happy to comment.

If MR scan is reported on a Friday, ensure graded sitting commences ASAP to avoid unnecessary flat bed rest over the weekend. This can be done by a trained member of staff, e.g. doctor, nurse or physiotherapist.

7. Bracing with Cervical collars / Thoraco-lumbar supports

- If cervical collars are required for patients with suspicion of, or confirmed MSCC (patients with severe pain on movement and/or deteriorating neurology where pain is due to spinal instability) refer to the Physiotherapy Department from 8 am 4 pm (Mon-Fri). Out of hours, contact the on-call physiotherapist via switchboard (overnight, 16:00 to 08:00). The physiotherapy department have a stock of collars available 24/7,
 - however, braces (CTLSO/CTO/TLSO/LSO) must be ordered from the manufacturers. These require patients to be measured and are ordered on a bespoke basis.
- For removal and re-positioning including care of collar/brace the

Document name: SOP for the management of patients with metastatic spinal cord compression (MSCC) within The Christie

Document Ref: CP80

physiotherapist will handover to nurse responsible for patient so that nursing team can continue with safe collar care. In emergencies, the on-call physiotherapist may be contacted between 16:00 and 08:00 for any patients requiring a new collar to be fitted.

 Role essential MSCC training including management of collars to be attended by all registered nursing and radiotherapy staff, and other staff members who require this training. Book a place via the Christie learning zone.

All patients who are prescribed with a brace require routine follow up by clinical team to review the need for continued use of the brace. Brace prescription should include rationale for brace (spinal stability / pain control), duration of use (24 hours/day / for mobilising only).

Document name: SOP for the management of patients with metastatic spinal cord

compression (MSCC) within The Christie Document Ref: CP80

VERSION CONTROL SHEET

Version	Date	Author	Status	Comment
V01	17/06/15	Lena Richards	Closed	
V02	29/02/16	Lena Richards	Closed	Medical Assessment Unit changed to Oncology Assessment Unit
V03	15/08/16	Lena Richards	Closed	Contact details updated
V04	12/01/17	Lena Richards	Closed	Communication of radiology findings
V05	03/01/18	Lena Richards	Closed	Contact details updated
V06		Lena Richards	Closed	Symptoms, contact details
V07	22/09/20	Lena Richards Kristina Coe	Closed	Reviewed as date expired
V08	9/07/24	Claire Shanahan - MSCC Clinical Coordinators	Approved	Full review. Updated to new Christie template. Updated guidance on bed rest and steroids in line with new NICE guidance. Amended times and contact information for physiotherapy team.

Document name: SOP for the management of patients with metastatic spinal cord compression (MSCC) within The Christie

Document Ref: CP80