Acute Management of Malignant Spinal Cord Compression

Assessment and initial management:

**Presentation**
- Severe back pain ≥ 1 week
- Arm / leg weakness
- Numbness in upper / lower limbs
- Urinary incontinence
- Faecal incontinence

**Known diagnosis of cancer**

**No oncology history**
- CT scan
- d/w neurosurgical SpR for surgical opinion

**Initial management of symptoms**
- Lie flat
- Log roll only for any care
- Oral dexamethasone 8mg bd
- Proton pump inhibitor or H2 blocker
- Analgesia

**Examination:**
- BP, pulse, resps
- Neurological exam – ASIA score (see overleaf)
- Normal breath sounds
- Abdominal
- Pain assessment

**Investigations:**
- FBC, U&E’s, glucose, LFT’s
- Bone profile
- CXR

**Urgent MRI** (using MRI guidelines for whole spine imaging)

**MRI confirms MSCC**

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**Neurosurgical opinion**
- Case to be discussed and care pathway determined at neuro-surgical MDT meeting

**No**

**Urgent MRI**

**Is spine stable?** (documented in notes)

**Yes**

Commence appropriate mobilisation plan (if complete and pain-free)

**Admit to ward**

**No**

**Plan and start radiotherapy**

**Admit to ward**

**Non-surgical management**
- Care taken over by oncologist

**Surgical management**
- Care taken over by neurosurgeons

**Other considerations**
- Pre-admission level of independence / mobility rating (Barthel index – see guidelines)
- Braden score documented (see accompanying guidelines)
- Pressure area care

**Bone profile**

**CXR**

**FBC, U&E’s, glucose, LFT’s**

**Bone profile**

**CXR**

**Neurosurgical opinion re:**
- spine stabilisation
- histology
- decompression
- Case to be discussed at neuro-surgical MDT meeting
- Care pathway determined

**Case to be discussed and care pathway determined at neuro-surgical MDT meeting**

**Fit for MRI scan or further interventional treatment**

**MRI confirms MSCC**

**FBC, U&E’s, glucose, LFT’s**

**Bone profile**

**CXR**

**Neurosurgical opinion re:**
- spine stabilisation
- histology
- decompression
- Case to be discussed at neuro-surgical MDT meeting
- Care pathway determined

**Case to be discussed at neuro-surgical MDT meeting**

**Care pathway determined**

**Admit to ward**

**Refer to surgical appliances**

**Refer to surgical appliances for brace or collar**

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**If incomplete**
- manage pain
- preserve function
- prevent further functional loss
- Also consider above for complete

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**Refer to palliative care team**
- consider hospice referral / home discharge

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On admission to ward:

- **Assessment and review**
  - Ensure referral to surgical appliances made
  - Surgical appliance fitted within 72hrs of admission

- **Pain control**
  - Administer patient's usual analgesia as prescribed (if appropriate)
  - Consider additional analgesia for breakthrough pain or before mobilisation / care
  - Monitor effect of pain control regime
  - Liaise with Palliative Care Team

- **Ensure referral to**
  - Neuro-surgical SpR
  - Physio
  - OT
  - Palliative care team
  - Social worker, as required

- **Is patient mobile?**
  - Yes
  - No

- **Pressure Area Care**
  - Ensure Braden assessment completed
  - Nurse patient on continuous air flow mattress
  - Assess pressure points & skin integrity 4 hourly
  - Ensure skin kept clean & dry at all times

- **Has patient had radiotherapy?**
  - Yes
  - No

- **Has patient had problems with elimination?**
  - Yes
  - No

- **Symptomatic care post-radiotherapy**
  - **Diarrhoea:**
    - Administer immodium® as prescribed
    - Ensure skin kept clean and dry at all times
    - Monitor skin integrity and take appropriate action
    - Send specimen for MC&S if persistent???
  - **Nausea & vomiting:**
    - Administer anti-emetic as prescribed & monitor effect
    - Ensure plentiful supply vomit bowls & tissues
    - Ensure patient remains well-hydrated
      - Consider IV hydration
  - **Anaemia:**
    - Check Hb 2 days post-radiotherapy
    - Iron tablets given as prescribed
    - Consider blood transfusion if Hb <10g/dl or patient symptomatic

- **Address any elimination problems** – depends on sensory impairment
  - **If urinary:**
    - Has patient passed urine since admission?
      - If no, is the patient in retention?
        - If no, send sample for MC&S
        - Consider catheterisation
        - If catheterised, ensure catheter hygiene care performed at least od
  - **If faecal:**
    - Has patient had bowels open since admission?
    - Instigate bowel retraining programme as per neuro protocol
      - Lactulose® to be given nocte
      - Suppositories given every am as prescribed
      - Commode given shortly after suppositories

- **Continue subsequent care**
  - (see overleaf)
Subsequent care:
- Review on a daily basis
- May happen concurrently

Pain control
- Reviewed daily
- Liaison with palliative care teams

Steroid regime:
- When neurologically stable or radiotherapy completed commence steroid reduction plan (see accompanying guidelines)
- Reduction rate will depend on total duration of steroid treatment
- If neurological function deteriorates with reduction return to previous dose and when stable attempt reduction at slower rate

Assistance with ADL’s

Hygiene:
- Assist where appropriate
- Catheter care as appropriate

Nutritional needs:
- Encourage high fibre diet and plenty of fluids
- Liaise with dietician as appropriate

Elimination needs:
- See overleaf

Spiritual needs:
- Refer to chaplain as requested

Psychological needs:
- Refer to psychotherapist if requested

Sleeping:
- Ensure patient gets plenty of rest

Mobilisation plan
- To be determined by physio and OT

Freely mobile / independent transfers +/- aids:
- No brace indicated

Mobile with brace / assisted transfers +/- aids:
- Log roll to apply brace
- Check pressure points around brace
- Brace can be removed when patient in bed

Immobile / nil transfers or mobility:
- Bedrest
- Log roll for all care
- Nurse patient on continuous air flow mattress
- Ensure regular pressure areas care given

Steroid regime:
- When neurologically stable or radiotherapy completed commence steroid reduction plan (see accompanying guidelines)
- Reduction rate will depend on total duration of steroid treatment
- If neurological function deteriorates with reduction return to previous dose and when stable attempt reduction at slower rate

Discharge planning
- To commence on admission

Palliative care team:
- Ensure patient and family / carer educated re: pain control regime
- Refer to community palliative care teams as appropriate
- Refer to hospice as indicated

OT:
- Assessment of functional ability +/- recommendations for equipment care package or further therapy required
- Assessment of home environment with input from existing carers.
- Home visit only if appropriate. (i.e. inadequate information re: home situation)

Physio:
- Assessment of mobility +/- recommendations for mobility aids or further therapy
- Input needed as required.

Ward staff:
- Refer to rehab / convalescence as appropriate
- Ensure social services in place as required
- GP letter written
- DN referral completed
- TTA’s explained to patient and family / carer
- Transport arrangements checked and booked 24hrs in advance