

Initial care for a spinal Patient

NICU Bitesize

slido



What Do you Know About Spinal Patients?

① Start presenting to display the poll results on this slide.

Neurological care

Ensure 2 hourly full spinal assessment if patient is conscious

Report any changes in Assessment quickly to NIC and Registrar

Airway

Check neck for any swelling

When securing the airway maintain manual inline Stabilisation

If Ventilated Check Airway is Secure

Breathing

Measure Patients Vital Capacity (Vc) once every shift (if unsure how to do this please liaise with the physiotherapists) *if $V_c < 15\text{ml/kg}$ please refer this to the anaesthetist urgently

Check patient for signs of respiratory fatigue Some spinal patients breath better when lying flat

Consider the use of the cough Assist and/or BiBPAP for lesions above T11 Consider ventilation if $RR > 30 \text{ b/min}$ or $VC < 15\text{ml/kg}$

Once Patient is ready to weane from the ventilator the given an individual weaning plan, **DO NOT** deviate from this plan unless you are directed to by neuro anaesthetic consultant

Neurogenic pulmonary odeama can be present in high cervical spinal cord injuries

Circulation

Spinal injury causes hypotension (neurogenic shock), bradycardia (T6 and above) and poikilothermic)

- Hypotension may be due to combination of blood loss and vasodilation
 - so a central venous catheter would be helpful.
- Exclude other injuries that can cause hypotension. A combination of fluid resuscitation and vasoconstrictors may be needed.
- The use of Cardiac output Monitor is helpful and is recommended.

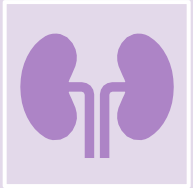
Aim for MAP ~ 80- 90mmHg.

- Increased vagal activity may cause bradycardia (often triggered by airway manipulation):
- Pre-oxygenation and atropine are useful preventative measures.

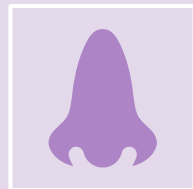
GI



Paralytic ileus is common.



The incidence of aspiration may be as high as 35%



Insert a Naso/orogastric tube within 4 hours from admission.
(See Spinal Admission quick guide

Establish feeding slowly with the addition of pro-kinetics as needed.
PPI is mandatory.

Bladder and Bowels

Monitor urine output hourly
aim for euvolemia unless
instructed otherwise
instructed

Follow Bowel care quick guide
for bowel management

DVT Prophylaxis

Prescribe DVT prophylaxis as per guidelines.

Apply mechanical protection early if not contraindicated.

Positioning

Ensure Patient is rolled every 4 hours and if spine has not been documented as clear ensure the patient is log rolled

- If possible lie patient on their side where possible whilst keep spine in alignment (if unsure how to do this please see log roll video)
- Ensure passive limb movement are performed when turning to prevent contracted limbs, if you limbs are becoming contracted liaise with physios and OT.
- pt has a Miami J collar full skin check and a log roll out of the collar must be done once per shift

Psychological Care

This Client group as extremely and understandably prone to anxiety and depression this can dramatically hinder their recovery

They need a lot of time and reassurance

Mr Jamie Clavicle

Mr Jamie Calvical, 21 years old, dived into a shallow swimming pool at a pool party sustained C2-3 # and spinal cord injury.

He has just been transferred to us from A and E.

He is intubated and ventilated on PSIMV.

He has a weak cough on suctioning and has minimal creamy secretions.

Chest sounds clear on auscultation.

He has BP of 105/45
MAP 65 mmHg,

HR 55 bpm sinus bradycardia,

His temperature is 36°C. He has arterial line a Left IJV and 2x 18G peripheral lines

slido



What initial Care Does Jamie Need ?

① Start presenting to display the poll results on this slide.

With in the First 4 Hours of Admission

Spinal Mattress

Complete a FULL
spinal Assessment

Ensure Miami J
Collar Fitted

Keep Atropine and
Glycopyrolate at
bedside - easily
accessible

Measure patient's
Vital Capacity

Analgesia needs to
be prescribed and
given

Ensure Laxatives
prescribed

Insert arterial
line, central line
and NGT

Catheterise
patient

VTE prophylaxis

Log Roll Patient

Check skin
integrity

Do PR and assess
Anal tone

Connect
Haemodynamic
Monitor

With in the First 24 hours

A surgical plan
needs to be
documented

Physio assessment
completed

Spinal Clearance
documentation
completed

ASIA Assessment
completed (to be
completed by
Physios and
neurosurgeons)

Trauma Secondary
Survey completed

Occupational
Therapy referral

Physios to refer
patient to Spinal
Injury Unit

SLT referral must be
completed

Jamie's Log Roll

You go to do
Jamie's Log
roll



His BP
drops to
75/40



His HR
drops to
35b/min

slido



What Do You Think Jamie Needs Now?

① Start presenting to display the poll results on this slide.

Jamie's Log Roll Actions

Pause the Log Roll
and Place Jamie on
His back

Give Fluid
Challenge ideally
against
Haemodynamic
Monitor

May Glycopyrrolate

May need Atropine

Get Noradrenaline
Ready

Check Patients
Temperature/Skin



Videos

- ▶ [Fitting a Collar in Bed](#)
- ▶ [Collar Care](#)
- ▶ [Log Roll](#)
- ▶ [Completing a spinal Assessment](#)

Quick Guides

- ▶ Management Of a Traumatic Spinal Patient
- ▶ Spinal Bowel Guide
- ▶ Spinal Injury Admission