Sri Lanka Spinal Cord Network

Challenges in Empowering Persons with Disabilities

"Towards Total Care"

6th Annual Academic Sessions

17th & 18th November 2017
District General Hospital
Polonnaruwa

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The 6th Annual Academic Sessions

of the

Sri Lanka Spinal Cord Network

"Challenges in Empowering Persons

with Disabilities"

Programme

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Message from the President of the Democratic Socialist Republic of Sri Lanka

අතිගරු ජනාධිපති මෛත්‍රිපාල සිරිසේන මැතිතුමාගේ පණිවුඩය!

සුෂුම්නා ආබාධ පුද්ගලයන් මුල් කර ගෙන ආබාධ පුද්ගල ප්‍රජාව වෙනුවෙන් සුෂුම්නා අනතුරු පිළිබඳ ශ්‍රී ලංකා ජාලය මගින් සිදු කරනු ලබන මෙම සේවාව ඉතා අගය කොට සලකන අතර රටේ නායකයා ලෙස මාගේ සුභාශිංසනය පුදකර සිටින්නෙමි.

රටක දියුණුවත් සමග ආබාධ සහිත පුද්ගලයන්ගේ ජීවිතවල ගුණාත්මක භාවයද ක්‍රමයෙන් දියුණු විය යුතුව ඇත. මේ සඳහා රාජ්‍ය මෙන්ම රාජ්‍ය නොවන සංවිධානවලද කාර්යභාරය ඉතා වැදගත් වනු ඇත. ආබාධ සහිත පුද්ගලයන්ට සපයා දෙනු ලබන සේවා දිවයින පුරාම මනා ලෙස ව්‍යාප්තව තිබිය යුතුය. ඒ සඳහා විශේෂිත වූ පුනරුත්ථාපන රෝහල්, පළාත් මට්ටමින් සහ ප්‍රජා මට්ටමෙන්ද, මෙවැනි සේවාවන් ඇති වී තිබීම අත්‍යාවශ්‍ය කරුණකි.

පොදුවේ ගත් කල ආබාධ වළක්වා ගැනීම, ප්‍රතිකාර කිරීම, පුනරුත්ථාපනය සහ නැවත ඔවුන් සක්‍රීයව රටේ ආර්ථික ක්‍රියාවලියට දායක කොට ගෙන ප්‍රජාවට එක් කිරීම සඳහා, වැඩ සටහන් ක්‍රියාත්මක කළ යුතුය. මෙවැනි වැඩසටහන් ඉතා ඉක්මනින් ක්‍රියාත්මක කිරීම ඉතාමත්ම කාලෝචිත වන අතර ආබාධ සහිත පුද්ගලයන්ගේ අයිතිවාසිකම් සුරකීමත්, ඔවුනටද සම අවස්ථාවන් ලබා දීමත් අපගේ යුතුකමක් වන්නේය.

Message from the President of The Sri Lanka Spinal Cord Network

Program - 17th November 2017

8:00 am – 9:00 am	Registration	
9:00 am – 9.30 am	Inauguration	Chief Guest : His Excellency the President Hon. Maithreepala Sirisena Special Guests : Hon. Dr. Rajitha Senaratne, Minister of Health, Nutrition & Indigenous Medicine Hon. Mr. Peshala Jayarante Chief Minister, North Central Province
9:30 am – 09:45 am	Overview of Spinal Cord Injury - Total Care Concept	Dr. N Pinto Consultant Orthopaedic & Trauma Surgeon President SLSCoN
9:45am—10:00 am	Pre Hospital Management of SCI Injuries- Essentials of Trauma Care	Dr. Dasun De Alwis Consultant Orthopaedic & Trauma Surgeon General Hospital, Polonnaruwa
10:00 am – 10:05 am	Entertainment	Rehabilitation Hospital, Jayanthipura
10:05 am – 10.20 am	Definitive Management of SCI	Dr. Udai De Silva Consultant Orthopaedic & Trauma Surgeon, Prov. Gen. Hospital, Badulla
10:20 am – 10:40 am	Pros & Cons of Surgical and Conservative Management of Spinal Cord Injuries	Dr. N Pinto, Consultant Orthopaedic & Trauma Surgeon, President SLSCoN
10:40 am – 11:00 am	Acute Care Rehabilitation of SCI	Dr. Ajith Kithsiri National Trainer – SCI Rehab.
11:00 am – 11:30 am	Tea	
11:30 am – 11:45am	Case Scenarios	Dr. Narendra Pinto FRCS Dr. Ajith Kithsiri
11:45am – 12:15 am	Pressure sore Management	Dr. Dammika Dissanayake FRCS Consultant Plastic Surgeon, NHSL
12:15 am – 12:45 pm	Lunch & Paper Presentations	
12:45 pm – 12:55 pm	Entertainment / Talent Show	
12:55 pm – 1:10 pm	Bladder Management	Prof. Neville Perera FRCS Consultant Genito Urinary surgeon,
1:10 pm – 1:20 pm	Sexual Rehabilitation for a successful family life	Dr. Ajith Malalasekara FRCS Consultant Genito Urinary surgeon,
1:20pm – 1:45pm	Nursing Care of the SCI patient (Bladder. Bowel & Skin care)	Dr. Ajith Kithsiri Ms. Chamika Niroshani Nursing Officer, NHSL Ms. K.S. Jayasekara Nursing Sister/ RH, Jayanthipura
1:45 pm – 2:05 pm	Physiotherapy Management of SCI	Mr. C.H. Danapala PT, RH Jayanthipura
2:05pm – 2:25 pm	Essentials in Occupational Therapy Management of SCI	Mr. K. N.K. Karunaratne OT, RH Jayanthipura
2.25 pm – 2:45 pm	Community reintegration	Dr. Ajith Kithsiri National Trainer – SCI Rehab.
2:45pm – 3.00 pm	Social Support	Mr. Dammika W. Bandara , SSO, NHSL
3.00pm-3.15pm	Audit – Admissions to RH Jayanthipura since 2016.	RH Jayanthipura
3.15pm – 3.30 pm	Tea	

Program - 18th November 2017

8.00 am - 9.00 am	Registration	
9.00 am - 9.20 am	Inauguration	Chief Guest: Hon. Vajira Abeywardane Minister of Home Affairs.
9.20 am – 9.30 am	Responsibility of Govt. Servants as new stakeholders for community care of persons with disabilities.	Dr. N Pinto, Consultant Orthopaedic & Trauma Surgeon President SLSCoN
9.30 am – 9.50 am	Essential knowledge of Spinal Cord Injuries	Dr. N Pinto, Consultant Orthopaedic & Trauma Surgeon President SLSCoN
9.50 am – 10.10 am	Prevention, Pre hospital Management, Essential First Aid and Self Transport	Dr. Ashan Abeywardane Consultant Orthopaedic & Trauma Surgeon
10.10 am – 10.40 am	Community inclusion of Spinal Cord Injury persons	Dr. Ajith Kithsiri National Trainer – SCI Rehab. Mr. Dammika W. Bandara , SSO, NHSL
10.40 am – 11.10 am	IBR & CBR Collaboration Essential factors for a successful family life of persons with physical disabilities.	Mr. K.N.K. Karunaratne Occupation Therapist, RH Jayanthipura Mr. C.H. Danapala Physiotherapist, RH Jayanthipura Mr. S. Dayaratne SSO, RH Jayanthipura
11.10 am – 11.30 am	TEA	
11.30 am – 11.45 am	Services of Social Service Dept. for person with disabilities.	Mr. Dammika W. Bandara , SSO, NHSL
11.45 am – 12.15 pm	Role of new stake holders regarding rehabilitation of persons with disabilities.	Dr. N Pinto, Consultant Orthopaedic & Trauma Surgeon President SLSCoN Dr. Ajith Kithsiri National Trainer – SCI Rehab.
12.15 pm – 12.30 pm	Identify new strategies for successful community base rehabilitation. Future Programmes.	Dr. N Pinto, Consultant Orthopaedic & Trauma Surgeon President SLSCoN
12.30 pm – 12.45 pm	Drama	RH Jayanthipura.

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Pre Hospital Management of spinal Cord Injuries

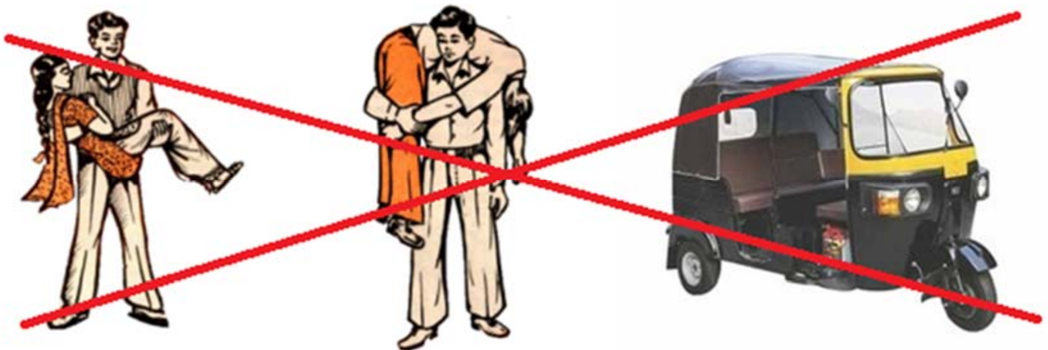
- Spinal cord injury (SCI) is a serious condition that may lead to long-term disabilities placing financial and social burden on patients and their families, as well as their communities.

- Spinal immobilization has been considered the standard pre hospital care for suspected SCI patients.

- 5% of all spine injuries could have another spine injury (not at adjacent level).

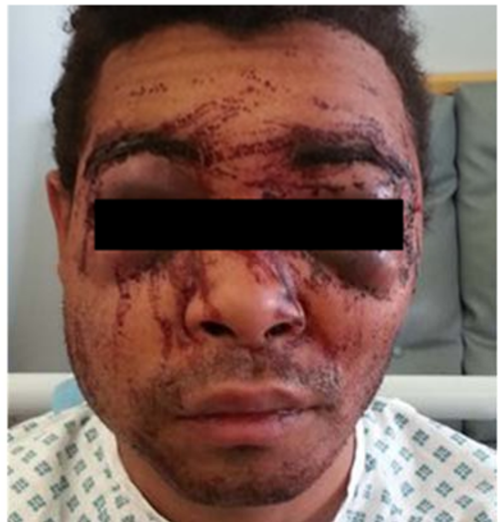
These patients could suffer catastrophic irreversible spinal injuries, if they are not handled and transported without immobilizing the spine properly. (Ex. transporting in three wheelers)

These patients could suffer catastrophic irreversible spinal injuries, if they are not handled and transported without immobilizing the spine properly.



When to Suspect Spinal Cord Injury

- High velocity injury (Road traffic accidents, Fallen from height)
- Facial injuries / Head injury
- Numbness / pins and needle sensation of limbs / difficulty in moving limbs
- Unconscious patient,
- Previous spinal problems/ surgeries



Extrication

When there is immediate threat to a person's life and rapid extrication is needed, make all efforts to limit spinal movement without delaying treatment.

- Consider asking a person to self-extricate if they are not physically trapped and have none of the following:
    - ∗ significant distracting injuries abnormal neurological symptoms (paraesthesia or weakness or numbness)
    - ∗ Spinal pain
    - ∗ High-risk factors for cervical spine injury as assessed by the Canadian C-spine rule.
    - ∗ Explain to a person who is self-extricating that if they develop any spinal pain, numbness, tingling or weakness, they should stop moving and wait to be moved.
    - ∗ When a person has self-extricated: ask them to lay supine on a stretcher positioned adjacent to the vehicle or incident in the ambulance.

Assessment of spinal injury

On arrival at the scene of the incident, use a prioritising sequence to assess people with suspected trauma, for example ABCDE: (Airway Breathing, Circulation, Disability, Exposure).

- At all stages of the assessment: protect the person's cervical spine with manual in-line spinal immobilization.
- Avoid moving the remainder of the spine.

- Assess the person for spinal injury, initially taking into account the factors listed below.
    - ◊ Significant distracting injuries
    - ◊ Under the influence of drugs or alcohol is confused or uncooperative has a reduced level of consciousness
    - ◊ Spinal pain has any hand or foot weakness (motor assessment) has altered or absent sensation in the hands or feet (sensory assessment)
    - ◊ Priapism (unconscious or exposed male) has a
    - ◊ History of past spinal problems, including previous spinal surgery or conditions that predispose to instability of the spine.

Carry out full in-line spinal immobilisation if any of the above factors present.

Assessment for cervical spine injury

Assess whether the person is at high, low or no risk for cervical spine injury using the Canadian C-spine rule as follows:

The person is at high risk if they have at least one of the following high-risk factors:

- Age 65 years or older
- Dangerous mechanism of injury (fall from a height of greater than 1 metre or 5 steps, axial load to the head – for example diving, high-speed motor vehicle collision)
- Paraesthesia in the upper or lower limbs

The person is at low risk if they have at least one of the following low-risk factors:

- Involved in a minor rear-end motor vehicle collision comfortable in a sitting position ambulatory at any time since the injury
- No midline cervical spine tenderness delayed onset of neck pain
- Unable to actively rotate their neck 45 degrees to the left and right (the range of the neck can only be assessed safely if the person is at low risk and there are no high-risk factors).

The person has no risk if they: have one of the above low-risk factors and are able to actively rotate their neck 45 degrees to the left and right.

(Be aware that applying the Canadian C-spine rule to children is difficult and the child's developmental stage should be taken into account).

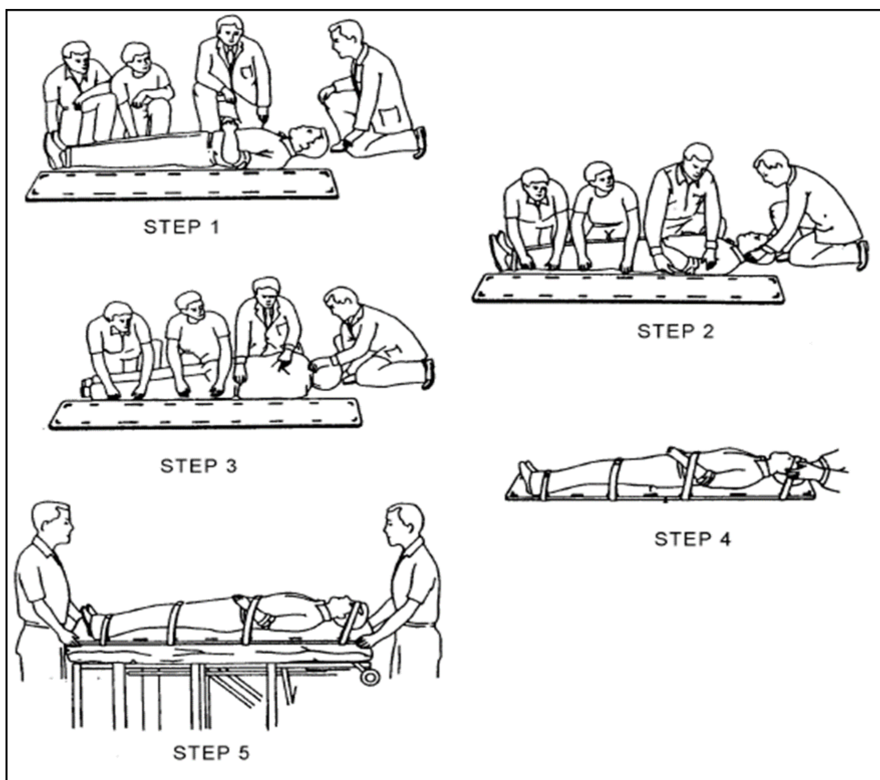
Carry out or maintain full in-line spinal immobilisation if: a high-risk factor for cervical spine injury or thoraco- lumbarinjury is identified

How to immobilize the cervical spine

- Cervical Collar and Blocks with head strapped to the spinal board.
- Alternatives : Two large bricks / Sand Bags / Two Logs by the side of the head strapped to the transporting board

How to Immobilize and transport suspected thoraco- lumbar injury

- Log roll in to spine board and strap to the spine board.
- Minimize movement of the spine



Pain relief

Offer medications to control pain in the acute phase after spinal injury.

- For people with spinal injury use intravenous morphine as the first-line analgesic and adjust the dose as needed to achieve adequate pain relief.
- If intravenous access has not been established, consider the intranasal route for atomised delivery of diamorphine or ketamine.
- Consider ketamine in analgesic doses as a second-line agent

Immediate destination after injury

Be aware that the optimal destination for patients with major trauma is usually a major trauma centre. In some locations or circumstances intermediate care in a trauma unit might be needed for urgent treatment.

Reference :

Spinal injury assessment and initial management - NICE guideline. Published: 17 February 2016

By Dr Nirmal Marasinghe, Consultant Trauma & Orthopaedic surgeon, Base Hospital , Puttalam

Goals for Bladder Management in SCI

The goals for bladder management include:

- Protecting upper urinary tracts from sustained high filling and voiding pressures (i.e. >40cm water)
- Achieving regular bladder emptying, avoiding stasis and bladder overdistension and minimising postvoiding residual volumes to less than 100mls (ideally
- Preventing and treating complications such as urinary tract infections (UTIs), stones, strictures and autonomic dysreflexia
- Maintaining continence and avoiding frequency and urgency
- Choosing a technique which is compatible with person's lifestyle

Choice of definitive bladder management will be determined by the following factors

- Type of bladder impairment(determined by level and extent of neurological lesion on clinical examination as well as urodynamic testing.
- Status of upper urinary tracts/renal function
- Functional ability: particularly mobility, sitting balance and hand function
- Patient's cognitive ability, motivation and lifestyle
- Bladder management recommendations may change over the patient's lifetime independent of their initial spinal cord neurological assessment.

Intermittent Catheterisation During the first few weeks after injury

Overdistension of the bladder should be avoided by continuous drainage of the bladder with an in-dwelling urethral catheter or percutaneous suprapubic drainage until after the postinjury diuresis (usually 7-10 days after injury) has occurred.

After this period, regular intermittent catheterisation may be commenced, helping to maintain bladder capacity and compliance.

Long term in both male and female patients with paraplegia or males with tetraplegia and sufficient hand function, clean intermittent self-catheterisation (CISC) every 4-6 hours is the preferred method,

Intermittent catheterisation, whether performed acutely or chronically, has the lowest complication rate.

Indwelling Catheterisation (Urethral and Suprapubic)

Female patients with tetraplegia, due to difficulty with CISC and lack of a satisfactory external collecting device, generally use either a suprapubic or an indwelling urethral catheter.

In addition, increasingly in males with tetraplegia, where there are concerns about long-term complications that may be associated with high intravesical pressures from unbalanced reflex voiding, suprapubic catheters are being recommended.

Anticholinergic medications are usually recommended to control detrusor overactivity and maintain some bladder compliance and capacity,

With diligent care and ongoing medical follow-up, indwelling suprapubic catheterisation may be an effective and satisfactory bladder management choice for some people, though there is insufficient evidence to report lifelong safety of such a regime.

If an indwelling catheter is to be used long-term, a suprapubic catheter is generally preferred to avoid complications.

Acute Nursing Care for Spinal Injury Patients

Objectives

Life saving with the Team

Maintain Medical/Surgical Stability

Prevent complications (PRESSURE SORE,INFECTION)

Early mobilization

Patient/Family Education

OUR PROTOCOL

(WITHIN 1 HOUR)

- Assess the patient (Air way, breathing, circulation and cervical spine, GCS, Pressure sores)
- Check vital functions
- Any other injuries
  - Head injury
  - Chest injury
  - Wounds
- Double Incontinence
- Check ASIA level
- Patient education (fluid intake, nutrition, Skin care)

WITHIN DAY-01

- Details Assessment(social problems)
- Assess Psychological Condition
- Family Members Education
- Explain About Skin ,Bladder and Bowel care

WITHIN ONE WEEK

- Investigations
- Reassess-ASIA
- Bladder management

  maintain bladder capacity

  TWOC

  To checked residual volume
- Bowel Management

WITHIN 42 DAYS

- Reassess ASIA level
- Investigation(x-ray,MRI as needed, USS[KUB]
- Mobilized the patient after vos opinion
- Complete the discharge plan [at home , Rehabilitation Hospital]

R. A. C Niroshanie

Nursing officer,

Spinal Injury Model Unit,

National Hospital of Sri Lanka.

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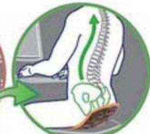

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Grow happiness, nurture smiles

ඔබ කාගිල්ස් ෆුඩ්සිටියෙන් එළවළු හා පළතුරු මිලදී ගන්නා විට හා කාගිල්ස් නිෂ්පාදන පරිභෝජනය කරන සෑම අවස්ථාවකදීම, ගොවි ප්‍රජාව ශක්තිමත් කිරීම සඳහා ඔබත් දායක වනු ඇත.

ඒ සෑම කිලෝවකටම හා ලීටරයකටම සත 50ක මුදලක් කාගිල්ස් සරුබිම අරමුදලට බැර කිරීමට අපට හැකිවේ. දෛනිකව අප විසින් දේශීය ගොවීන්ගෙන් මිලදී ගන්නා එළවළු හා පළතුරු ප්‍රමාණය කිලෝ ග්‍රෑම් 80,000ක් වන අතර කිරි ප්‍රමාණය ලීටර 90,000ක් පමණ වේ.

සතුට වගා කරන්න, සිනහව නෙළා ගන්න.

நீங்கள் ஒவ்வொரு முறை நம் நாட்டு மரக்கறி, பழங்கள் மற்றும் பால் உற்பத்திகளை வாங்கும் பொழுதும் விவசாயிகளின் குடும்பங்களை வளமாக்க வைத்து உதவுகின்றீர்கள்.

விவசாயிகளிடமிருந்து பெற்றுக்கொள்ளும் உற்பத்திகள் தொடர்பாக ஒவ்வொரு கிலோகிராம் அல்லது லீட்டருக்கும் 50 சதம் வீதம் காகில்ஸ் வளமிக்க நிலம் அறக்கட்டளைக்கு நாம் வழங்குகின்றோம். நாளாந்தம் நாம் தேசிய விவசாயகளிடமிருந்து பெற்றுக்கொள்ளும் மரக்கறி மற்றும் பழங்கள் 80,000 கிலோகிராம் என்பதுடன் பாலின் அளவு 90,000 லீட்டர்களாகும்.

மகிழ்ச்சியைப் பயிரிடுங்கள், புன்சிரிப்பை அறுவடை செய்யுங்கள்.

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