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**WELCOME MESSAGE BY CHAIRPERSON OF THE ORGANIZING COMMITTEE FOR
THE 7th ASCoN CONFERENCE, BACH MAI HOSPITAL HA NOI – VIETNAM**

My hospital is very proud today to host the Seventh Asian Spinal Cord Network conference in Bach Mai . The ASCoN network has seen its origins in one of the most dynamic areas in Asia since 2001 .

When ASCoN was created , it was meant to foster exchange between different institutions in different countries and share the knowledge on their similarities and differences with the aim to enrich the knowledge and innovation of the care for persons afflicted by Spinal Cord Injury .

Bach Mai hospital and Rehabilitation centre wants only to strengthen this exchange more by showing You our achievements in Vietnam and inviting You to contribute Your extensive experience in improving the care for SCI patients in Vietnam.

On a daily basis at least 2 spinal cord injuries occur in our country . Our health system tries to cope as much as possible by providing the best care possible for the persons with SCI and their families. In Vietnam, we believe that this care should be available at every level of the health care system , from the referral hospital down to provincial centres and from the home of the patients towards their community health centre through appropriate strategies of decentralizing care through training health staff and ensuring community based rehabilitation services close to the patient and his family .

My hospital also believes that we should pay special attention to prevention strategies in order to reduce the occurrence of the accidents and the subsequent burden of care SCI causes on the patients and their families

The conference will offer a unique opportunity to witness the progress of the set up of our spinal unit department in a relatively short time. It is also an honour to receive during the conference the numerous guests and experts that come to share with us their knowledge and experiences from 20 different countries.

We wish you a fruitful stay during this Seventh ASCoN conference and invite You to enjoy our Vietnamese hospitality along the way.

Director of Hospital Bach Mai
PGS – TS : Tran Thuy Hanh



**WELCOME MESSAGE BY THE ASCON CHAIRMAN FOR THE OPENING CEREMONY
OF THE 7th ASCoN CONFERENCE IN HA NOI- VIETNAM**



The challenge to organize the Seventh ASCoN conference in Hanoi has been big . I am happy to see that numerous delegates from all professions and from over 20 countries can join the conference in Hanoi at Bach Mai Hospital – Vietnam.

Since the last ASCON conference hosted in Ho Chi Minh City in December 2005, we learned that the impact of SCI on a person's life is tremendous as it changes his whole world and that of his family . Without proper care and follow-up , the person has few chances to overcome his new situation .

Moreover the economic and social consequences for the Spinal Cord Injured persons and their families are also more documented.

Extending the SCI care to provincial hospitals learned the health professionals and the health system how to address these needs . Very important has been the focus towards prevention strategies of Spinal Cord Injury accidents also .

In a very short period , Bach Mai Spinal Cord Injury department has been set up and is operational . It is now providing care to SCI patients . This process is part of a plan of extending the care through training of provincial health staff to 6 rehabilitation hospitals in Northern Vietnam . Elements of this training process are also open for Regional health staff members of ASCON , making this center also a regional resource for ASCON countries This conference is a kick start for this process .

Hosting this conference at Bach Mai hospital and rehabilitation center is a historic achievement for Spinal Cord Injury medicine in Vietnam. It convinces the health professionals in this field that the highest health authority in the country plays know a key role in developing the care , making it accessible within the health system and throughout the provincial hospitals in the future .

We are also fortunate to have at this conference several world renown experts in the field of SCI care . The exchange and interaction promises to be fruitful and will open up more opportunities for health staff and their patients wherever they are .

I wish to thank the organizing committee of Bach Mai hospital for their support , the sponsors who have made this possible and all the delegates that show a rising interest in improving the lives of persons with Spinal Cord Injury.

Eric Weerts
ASCON Chair person 2008
Project Coordinator SCI project
Bach Mai Hospital

MESSAGE FROM CHAIRMAN OF ISCOS EDUCATION COMMITTEE



As chairman of the Education committee of the International Spinal Cord Society - ISCoS, it gives me great pleasure to comment on the organization of the 7th ASCoN Conference, organized by Bach Mai Hospital .

ISCoS supports, advises and encourages the efforts of those responsible for the education and training of medical professionals throughout the world and this year, once again, we are happy to lend our support to the 7th ASCoN conference, here in Vietnam.

This year's theme of decentralizing the care and knowledge on Spinal Cord Injury management as well as promoting prevention of SCI accidents comes at a crucial time where efforts are needed to maintain the quality of care available to all . The Asian Region , with its specifics , provides also an interesting platform to develop prevention strategies needed to reduce the occurrence of accidents . The program of this conference is also addressing this in an original way , resulting from their efforts to find a consensus on basic accepted principles that improve care and confirm the need for prevention adapted to this dynamic region of the world.

The conference organizers should be applauded for their efforts in bringing together experts and professionals of various disciplines from more than 20 countries. There will be many opportunities for delegates to learn from each other formally throughout the programme and informally at mealtimes and the cultural exchange programme.

Our experience of networking through international bodies such as ISCoS and regional bodies such as ASCoN has proved that much can be learnt through collaboration. Such collaboration also encourages the most effective use of available resources and this is all the more important in developing countries where resources tend to be limited. Therefore I would encourage individuals and organizations present to take the opportunity of enrolling as ISCoS and ASCoN members respectively so that mutual learning can be further extended.

With best wishes for an enjoyable, valuable and enriching experience.

Dr H.S. Chabra
Medical Director Indian Spinal Injuries Center
Chairman of Education Committee of ISCOS

PROGRAMME OF ASIAN SPINAL CORD NETWORK CONFERENCE ASCON - 2008)

Venue: Main conference Hall , Bach Mai Hospital ,Hanoi

Dates: 09 – 11 December 2008

Monday , December 8, 2008

09:00 – 16:00: Clinical Guidelines discussion working group : Associate Professor Apichana Kovindha .

15:00 : Early Registration at Conference Hall

Day 1 – Tuesday , 09th December 2008

07:30- 08:00	REGISTRATION AND WELCOMING DELEGATES
08:00- 08:40	INAUGURATION CEREMONY by Health Authorities and conference organizers
08:00 – 08:10	Representative of Ministry of Health
08:10 – 08: 15	Representative of Bach Mai Hospital Direction
08:15 – 08:20	ASCON Representative : <i>Doctor HS Chabba</i>
08:20 – 08:25	ISCOS representative : <i>Professor JJ Wyndaele</i>
08:25 – 08:30	Representative Handicap International Vietnam : <i>Mr Philippe Martinez</i>
08:40 – 08:35	Representative of Grand Duchy of Luxemburg : <i>Mr Marc Franck</i>
08:35- 08:40	Representative of the Irish Embassy : <i>Mr Sean Hoy</i>
08:40 – 09:10	KEYNOTE LECTURE on SCI care in Vietnam : increasing the quality and coverage of SCI rehabilitation care , prevention strategies and early care
08:40 – 09:10	The roles and Responsibilities of a SCI reference centre , Provincial rehabilitation centre and strategies aiming at promoting socio economic integration of persons with SCI in Vietnam . <i>Phd. Tran Văn Chuong</i>
09:10 – 09:30	Prevention of Spinal Cord Injury accidents : <i>Dctr Douglas Brown</i>
09:30 – 09:45	Acute care and Surgical vs conservative Management of Spinal Injury : <i>Dctr H S Chabba</i>
09:45 – 10:00	Neuro-Urology - What is important?": Pathophysiology and diagnostic workup-JJ Wyndaele : <i>Wyndaele JJ</i>
10:00 - 10:15	Coffee Break and poster and exhibition viewing .
10:15 – 12:00	KEYNOTE LECTURES on functional rehabilitation and integration for persons with SCI.
10:15 – 10:30	Prevalence of Anxiety and depression in Spinal Cord Lesion patients and related factors : <i>Associate Professor Apichana Kovindha</i>
10:30 – 10:45	Physical rehabilitation in people with Spinal Cord Injuries . <i>Lisa Ann Harvey</i>
10:45 – 11:00	“Neuro – Urology – What is important” Therapeutic options : <i>Helmut Madesbacher</i>
11:00 – 11:15	Active rehabilitation methodology experiences in Vietnam : <i>Tomasz Tasiemski</i>
11:15 – 11:30	Sexuality and fertility after SCI : <i>Charlotte Kiekens</i>
11.30 – 11: 45	Peer counselling support and lifelong adjustment process in SCI : <i>Shivjeet Raghav</i>
11:45 – 12:45	LUNCH – poster an exhibition viewing
12:45 – 15:20	Abstract presentation session I : Epidemiology and first line treatment for patients with SCI . (9 presentations) : Chair : Apichana Kovindha – M Priebe
12:45 – 12:55	I1 Assessment on the management of patient with calcification of vertical alignment behind the cervical spine in Viet Duc hospital: <i>Dr Nguyễn Vũ</i>

12:55 – 13:05	I2	Assessment on the management of patient with cervical spinal cord injury in Viet Duc hospital: MA Duong Dai Ha
13:05 – 13:15	I3	Spinal cord lesion in Bangladesh: A descriptive study at a rehabilitation center-2008: Habib, Md Monjurul
13:15 – 13:25	I4	First assessment on the use of location method in surgery for patients with cervical spinal cord injury in Viet Duc hospital: Bs Nguyễn Vũ
13:25 - 13:35	I5	Tuberculosis of the Spine in Bangladesh: The current scenario: Mst. Reshma Parvin Nuri
13:35 - 14:45	I6	Surgery for patient with tumor on spinal cord in XanhPon hospital: Dr Duong Trung Kien
14:45 – 14:55	I7	Three years study of Spinal Cord Injury outcomes and related secondary complications in a tertiary centre – A retrospective analysis : Ohnmar H
14:55 – 15:10	I8	Spinal Cord Injury Following Electric Shock: Navnendra Mathur
15:10 – 15:20	I 9	Questions and Answers session
15:20 – 15:40		Coffee break and poster exhibition viewing
15:40 - 17:30		ABSTRACT presentation Session II (11 presentations) : Comprehensive treatment of complications of SCI . Chair : D Brown – Madersbacher – Wyndaele
15:40 – 15:50	II 10	Urinary tract management for patient with SCI: Huynh Phan Minh Thùy
15:50 – 16:00	II 11	Importance of a multidisciplinary approach to neurogenic bladder dysfunction in congenital and acquired spinal cord lesion in children: Dr Nguyen Duy Viet
16:00 – 16:10	II 12	Pain and sleep disorder in spinal cord lesion patients : Associate Professor Apichana Kovindha .
16:10 – 16:20	II 13	Treatment for children with Cerebral Palsy by Botulinum Toxin Type A (Dysport®): Dr Truong Tan Trung
16:20 – 16:30	II 14	Bowel management in young adults with spinal cord injury: Dr Nguyen Duy Viet
16:30 – 16:40	II 15	Use of intravesical oxybutynine instillation for SCI patients with overactive bladder: Dr Bùi Văn Anh
16:40 – 16:50	II 16	Use of urodynamic assessment system at HRPD – District 8 – HCM : overview of practice and results : Dr Bui Thi Lan Vi
16:50 – 17:00	II 17	A mini invasive treatment of vesico ureteral reflux in children with neurogenic bladder using combined injection of dextranomer/ hyaluronic acid copolymer and botulinum toxin- Dr Nguyen Duy Viet
17:00 - 17:10	II 18	Management of small pressure sore: Dr Nguyen Ngoc Vuong
17:10 – 17:20	II 19	Bladder Care of SCI patients at CRP: Exploring better management: Teresa Rozario
17:20 – 17:30	II 20	Carpal tunnel syndrome in paraplegic wheelchair users: Montana Pukahuta
17:30		End lecture program day 1

Day 2 - Wednesday, 10th December 2008

08:00– 08:45		TOUR OF THE SPINAL CORD REHABILITATION UNIT – BACH MAI HOSPITAL.
08:45 – 10:15		Concurrent workshop session 1 (each workshop has limited number of participants)
	W1	Neurogenic bladder management of SCI – practical urodynamic demonstration : Prof. Wyndaele JJ
	W2	Comprehensive nursing management and team work in SCI care: Dr Priebe – Dr Weurms
	W3	Orthotic and Technical adaptations for persons with SCI .
	W4	Active Rehabilitation practice for persons with SCI : Phd Tomasz Tasiemski
10:15 - 10:45		Coffee break
10:45 – 12:15		Concurrent workshop session 2 :
	W5	Essential Physiotherapy management of SCI : Ms Lisa Harvey
	W6	Use of Botox neuro toxins for Neurogenic bladder management : Dctr Loechner Ernst
	W7	<i>Repeat of workshop W2 accordingly</i>
	W8	Seating and cushion adjustment for persons with SCI : Dctr Slootman Hans
12:15 – 13:30		LUNCH
13:30 – 15:30		Concurrent workshop session 3 :

	W9	Peer counselling techniques and training methodology : <i>Shivjeet Raghav</i>
	W10	Intimacy and fertility after SCI : <i>Kiekens Charlotte</i>
	W11	WHO guidelines on wheelchair provision : <i>Constantine David</i>
	W12	Surgical spine management exchange : <i>Dctr HS Chabtra</i>
15:30 – 15:45		Coffee break
15:45 – 18:00		Departure to Gala evening site – visit of ethnological museum
18:00 – 21:00		Cultural exchange and Gala dinner for all delegates

Day 3 - Thursday, 11th December 2008

08:15 – 10:05		Abstract presentation session III (10 paper presentations) : Functional rehabilitation for SCI patients. Chair : Lisa Ann Harvey – Wuermser - Nguyen Thi Huong
08:15 – 08:25	III21	Body weight supported treadmill training versus over ground gait training: A comparative study on the effects of gait performance of motor incomplete spinal cord injury subjects : Mstr Mohit Arora
08:25 – 08:35	III22	Effect of Occupational Therapy on independent of spinal cord patients with ASIA: T2A – L1A: OT - Tong Thi Ngoc Huong
08:45- 08:55	III23	First assessment for the results of mobility rehabilitation on patient with spinal cord injury: MA.Dr Nguyen Thi Kim Lien
08:55- 09:05	III24	Assessment on management of patients with SCI at Phu Yen rehabilitation hospital: Dr Truong Thi Xuan Thuy
09:05 – 09:15	III25	Barriers to exercise for individuals with Spinal Cord Injury: An Indian Perspective: <i>Shefali Walia, Jaskirat Kaur</i>
09:15 – 09:25	III26	Factors influencing shoulder pain in paraplegic wheelchair users at CRP in Bangladesh: <i>Mst. Fatema Akter</i>
09:25 – 09:35	III27	Empowering person with physical disability through sports: Chitra Kataria
09:35 – 09:45	III28	By a typical case of patient with C6 A: KTV Hô Thi Thu Hà
09:45 – 09:55	III29	Transferring spinal cord injury management and rehabilitation techniques to provincial units: Bs Tran Minh Dong
09:55 – 10:05	III30	Orthostatic hypotension of patient with spinal cord injury: Dr Nguyen Do Hung
10:05 – 10:30		Coffee break
10:30 – 12:00		Abstract presentation session IV (8 paper presentations) Lifelong follow-up, management of care and socio – economic integration for SCI patients. Chair : Shivjeet Raghav - Constantine David – Kiekens
10:30- 10:40	IV31	A self-rehab and peer counseling network based in Beijing : Jun Wen
10:40 – 10:50	IV32	The Do's and Don'ts of Accessible Lodging: Guidelines for the Rehabilitation Specialist: Aaron Vamosh
10:50-11:00	IV33	Reflections on a visit to the SCI rehabilitation unit in HCMC, 2006 – a (European) nurse's perspective: Anna Katariina Koch
11:00 – 11:10	IV34	Comments on SCI rehabilitation outcomes in Khanh Hoa rehabilitation hospital: Bs Tran Thi Nhu Ngoc
11:10 – 11:20	IV35	A Prospective Study To Evaluate Sexual Problems in patients with Spinal cord injury: Dctr SL Yadav
11:20 – 11:30	IV36	Functional outcomes of patients with Spinal Cord Injury (SCI) at the Halfway hostel of the CRP in Bangladesh : Md. Shariful Islam
11:30 – 11:40	IV37	Identify the influencing factors of hopelessness of people with spinal cord injury in the Community : Md. Abdul Zabbar
11:40 – 11:50	IV38	Treatment on hand-function for SCI patients at cervical level: PT Dinh Lê Diễm
11:50 – 12:00	IV39	Role of Yoga practices in autonomic and higher function control in spinal cord injury : Dctr Vijay Sharma
12:00 – 13:00		LUNCH
13:00 – 15:00		Consensus reporting on SCI management issues
13:00 – 13:40		• Panel discussion on practice guidelines in comprehensive SCI care : Muldoon Stephen – Chabtra – Harvey – Priebe – Tapa

13:40 – 14:20		<ul style="list-style-type: none"> Panel discussion on presentation on prevention guidelines launching : Brown – Passmore – Greig Craft – Dctr Nguyen Hong Tu
14:20 - 15:00		<ul style="list-style-type: none"> Panel discussion on need for peer counselling guidelines and patient education Shivjeet - Kiekens – Aaron Vamosh- Siriwardane
15:00 – 15:30		Coffee break
15:30 – 15:40		Announcement of paper presentation contest results best paper presentation by jury representative
15:40 – 16:10		ASCON activities presentation and planning : Muldoon Stephen
16:10 – 16:15		Announcement of hosting ASCON 2009 – call and invitation : Chairman 2008
16:15 – 16:30		Closing remarks and take home message from the floor by conference organisers
		END OF CONFERENCE

ASIAN SPINAL CORD NETWORK (ASCoN)

What is ASCoN?

ASCoN consists of a group of organisations in the Asia region who have come together to share and learn from each other in all aspects of spinal cord injury management, from initial treatment of the patient to re-integration of the person.

Background

ASCoN was initiated in 2001 at the International Conference on Spinal Cord Lesion Management hosted by CRP, Bangladesh. Through the Network it was hoped that by coming together

- organisations could address similar problems experienced
- there would be increased opportunities to learn and
- good examples of spinal cord injury management could be replicated.

At the 42nd meeting of the International Spinal Cord Society (ISCoS) in September 2004 ASCoN became an affiliated society of ISCoS.

Objectives

To promote organisational and human resource development for organisations and people working in spinal cord injury management in the Asia region.

To share information, ideas and knowledge of best practices in spinal cord injury management among members.

Activities

- **Co-ordination and Networking**

Members represent 46 organisations throughout 16 countries in the region including:

Afghanistan, Bangladesh, Bhutan, Cambodia, India, Indonesia, Japan, Korea, Laos, Myanmar, Malaysia, Nepal, Pakistan, Sri Lanka, Thailand, Vietnam.

An Executive Committee acts as the decision making body of ASCoN. Executive Committee members are representatives from Thailand, Bangladesh, India, Myanmar, Vietnam, Nepal, Indonesia and Sri Lanka

- **Newsletter**

A newsletter is produced and distributed to members . Members contribute articles which are edited and included in the Newsletter.

- **Exchange Visits**

Members are responsible for liaising and networking with each other in order to organise exchange visits for staff and students.

Those sending staff/students are responsible for meeting travel and associated costs while those hosting staff/students are responsible for providing training free of charge.

John Grooms manages a fund which is used to support members on exchange visits, specifically to cover travel and visa costs.

- **Annual Conference and Meeting**

Each year an Annual Conference is hosted by member organisations. The 1st conference was hosted by CRP, Bangladesh, the 2nd by ISIC, India, the 3rd by Chiang Mai University, Thailand, the 4th by SIRC in Nepal , the 5th by the Hospital for Rehabilitation and Professional Diseases in collaboration with Handicap International, in Vietnam and the 6th by CRP in Dakha - Bangladesh .

At the annual regional meeting which is usually convened during the conference, a decision is taken by members on the location of the following year's conference.

The annual regional meeting also provides the opportunity for members to meet at least once a year on a face-to-face basis.

- **Development of appropriate protocols in spinal cord injury management for the Asia region**

A process is currently underway to develop a comprehensive protocol for spinal cord injury management for the Asia region. Once consensus on the general protocol is reached, it will then be possible to work on developing aspects of the protocol further and in more detail for different countries in the region.

Future Plans

Continuation of exchange visits, newsletter and annual conference

Development of protocols appropriate to the region

Development/adaptation of SCI management and patient education manuals

Promotion of research activities

Development of ASCoN Website

Development of ASCoN statutes/constitution

ASCON MEMBER ORGANISATIONS

Afghanistan

1. Puli Khumri Civilian Hospital, Baghlan Province

Bangladesh

2. Centre For The Rehabilitation Of The Paralysed, Savar, Dhaka
3. Trauma Centre, Dhaka
4. National Institute For Trauma And Orthopaedic Rehabilitation, Dhaka
5. Bangabondhu Sheikh. Mujibar University (Bssmu), Dhaka

Bhutan

6. Jigme Dorji Wangchuk National Referral Hospital

Cambodia

7. Regional Spinal Cord Injury Centre, Battambang
8. Preah Bat Norodomsihanuk Hospital
9. Handicap International (Cambodia)
10. Phnom Penh University Of Medical Sciences

India

11. Indian Spinal Injury Centre, New Delhi
12. Hope Hospital, Patna
13. Christian Medical College, Vellore
14. Indian Institute Of Cerebral Palsy, Kolkata
15. Handicap International India
16. Physiotherapy College, Civil Hospital, Ahmedabad
17. Madras Medical College, Madras

Indonesia

18. Fatmawati Hospital, Indonesia
19. Soewoto General Hospital

Japan

20. Graduate School Of Tohoku University

Korea

21. Dankook University Hospital

Laos

22. Friendship Hospital, Vientiane

Malaysia

23. University Malaya Medical Centre, Kuala Lumpur

Myanmar

24. Yangon General Hospital, Myanmar

Nepal

25. Green Pastures Hospital, Pokhara
26. Spinal Injuries Rehabilitation Centre, Kathmandu
27. Nepal Orthopaedic Hospital, Kathmandu
28. Spinal Cord Injury Association, Pokhara
29. Patan Hospital, Patan

Pakistan

30. Haji Ali Mohammad Foundation, Karachi

Sri Lanka

31. Ragama Rehabilitation Hospital, Ragama
32. Central Council Of Disabled Persons, Bandarewela
33. Spinal Injuries Association, Sri Lanka, Ragama
34. John Grooms Overseas, Mount Lavinia
35. National Institute For The Care Of Paraplegics, Kandy

Thailand

36. Prince Of Songkla University, Hatiya, Songkla
37. Siriraj Hospital, Bangkok
38. Rajavithi Hospital, Bangkok
39. Presat Neurological Institute, Bangkok
40. Sirindhorn National Medical Rehabilitation Centre, Nonthaburi
41. Songklanagarin Hospital, Songkla
42. Ramathibodi Hospital, Bangkok
43. Industrial Rehabilitation Centre, Pathumthani
44. Dept. Of Medicine, Chiang Mai University, Chiang Mai

Vietnam

45. Rehabilitation center of Bach Mai hospital
46. Handicap International Viet Nam

ASCON EXECUTIVE COMMITTEE MEMBERS**Dr Fazlul Hoque**Centre for the Rehabilitation of the Paralysed, **Bangladesh****Dr Apichana Kovindha**Chiang Mai University **Thailand****Mrs Maggie Muldoon**John Grooms Overseas **Sri Lanka**, *Secretary***Dr Bayu Santoso**Soetomo General Hospital, **Indonesia****Dr Capt Dilip Sinha**Hope Hospital, **India****Mr Cyril Siriwardane**Disability Organisations Joint Front, **Sri Lanka****Prof Than Toe**Society for Rehabilitation Medicine, **Myanmar****Ms Esha Thapa**Spinal Injury Rehabilitation Centre, **Nepal****Mr Eric Weerts**Handicap International, **Vietnam**, *Chairperson (2008)*

MEMBERSHIP OF THE ASIAN SPINAL CORD NETWORK (ASCON)

The Asian Spinal Cord Network (ASCoN) is a group of organisations in the Asia region that have come together to share and learn from each other in all aspects of spinal cord injury management, from initial treatment of the patient to re-integration of the person.

Applications for membership to ASCoN are welcomed from organisations in the Asia region that work in the field of spinal cord injury management. Membership is free. Application forms are available at the Organisation desk. Please complete the application form and deposit it at the ASCoN organisation desk or forward it by post or email to the ASCoN Secretary.

Email: jgoverseas@slt.net.lk

Postal Address: 17/1, 1/1 Circular Road
Mt Lavinia, Sri Lanka

(ASCoN) APPLICATION FORM

APPLICANT DETAILS

1. Your Name:
2. Your job title:
3. Department in which you work:

YOUR ORGANISATION DETAILS

The information provided in this section will ensure that the database for members is updated and correct

4. Name of your organisation:
5. Address of organisation:
6. Telephone:
7. Fax:
8. Email:
9. Website:
10. Who is the person responsible for your organisation?
11. What are the main activities of your organisation?
12. Please provide any additional information you feel is appropriate:

Signature:

Date:

THE REFERAL SPINAL CORD INJURY UNIT- REHABILITATION CENTER OF BACH MAI HOSPITAL - HANOI - VIETNAM



Since its establishment on February 14, 2005 under the Decision No. 287/QD-BYT, Rehabilitation Centre in Bach Mai Hospital has become the first and unique model of rehabilitation of Ministry of Health.

The Center was established with such following key functions and duties:

- To implement final line management and rehabilitation for all kinds of disabilities.
- To train specialized medical officials at graduate and post graduate level.
- To carry out specific researches related to disabilities, rehabilitation and community-based rehabilitation.
- To offer professional advice on specialty guidance to Ministry of Health.
- To supply concrete guidance in rehabilitation and community-based rehabilitation for all national- wide provinces/ cities.
- To cooperate with domestic and international organizations in the activities based on disabilities, rehabilitation and community-based rehabilitation.

Pursuant to The Decision No 4594/ QD- BYT dated November 14, 2007, The project “National Consultant Center for Spinal Cord Injury management and rehabilitation” has been carried out at Rehabilitation Center under the auspices of Handicap International Belgium with such objectives as to strengthen spinal cord injury management and rehabilitation capacity for rehabilitation facilities, to expand the project by establishing provincial satellites, to combine the activities of the center with the activities of Ministry of Health and Vietnam Rehabilitation Association in aspects of rehabilitation and community-based rehabilitation.

During the project implementation, many managers and officials of the center have been appointed to study abroad and exchange expertise at rehabilitation centers in Netherlands, Belgium, Luxembourg, India and Thailand. In aspect of human resource training, with the cooperation of domestic and international experts and professionals, the center has organized 08 training courses for doctors, nurses, physical therapists from rehab centers/ hospitals in Thanh Hoa, Bac Giang, Son La, Thai Binh, Ha Tinh and Phu Tho. The center has upgraded 04 rooms with 20 well-equipped beds for resident patients, 01 room for nursing care, 01 urodynamic room 01 physical therapy room, 01 occupational therapy room, 01 counseling room, outpatient treatment area, study room, library, office equipped to serve patients with spinal cord injury.

In 2008, the center has treated and rehabilitated over 100 spinal cord injured patients by the interdisciplinary approach and international standard-based care model. In cooperation with Handicap International, the center is in the process of choosing 6 provincial rehabilitation hospitals in the North to transfer knowledge, skills and professional activities in order to build the rehabilitation network from the central to grass-root level , to integrate rehab work into community and strengthen life quality of patients and people with disabilities.

ORGANIZING COMMITTEE

From Vietnam

1. Prof. PhD. Tran Thuy Hanh
Director of Bach Mai Hospital
2. PhD. Nguyen Quoc Tuan
Head of General planning department
3. PhD. Tran Van Chuong
Director of Rehabilitation center – Bach Mai hospital
4. Pro.PhD. Cao Minh Chau
Vice-Director, Rehabilitation Center – Bach Mai hospital
5. MBA Luong Tuan Khanh
Vice- Director, Rehabilitation Center- Bach Mai hospital
6. Engineer Do Trong Tai
Head of administrative and managerial department
7. PhD Nguyen Kim Son
Head of training center
8. BA Truong Mong Hang
Head of physiotherapy department of rehabilitation center- Bach Mai hospital

From ASCoN (Asian Spinal Cord Network)

5. Mr Eric Weerts
ASCoN Chairperson
6. Mrs Maggie Muldoon
ASCoN Secretary

Secretariat

7. Truong Thi Ngoc Anh

GUEST LECTURERS AND FACULTY MEMBERS

Associate Professor Apichana Kovindha
Faculty of Medicine, Chiang Mai University, Thailand

Professor Helmut Madersbacher
Neuro-Urologist, Bad Haring Centre, Austria

Associate Professor Tomasz Tasiemski
Poznan University, Poland

Professor Jean-Jacques Wyndaele
Head of Urology Dept, University Hospital Antwerpen, Belgium

Dr MM Priebe
Mayo Clinic , Minnesota , USA

Dr L.A. Wuermser
Mayo Clinic , Minnesota , USA

Dr H S Chhabra
Chief of Spine Service & Addl Medical Director, Indian Spinal Injuries Centre, (ISIC), New Delhi, India

Professor Tran Van Chuong
Director Rehabilitation Department Bach Mai Hospital, Vietnam

Professor Cao Minh Chau
Faculty of Medicine - Medical University , Hanoi , Vietnam

Professor Nguyen Xuan Nghien
Chairman of National Rehabilitation Centre, Vietnam

Dr Tran Trong Hai
Director General of International Cooperation Department MOH, Vietnam

Lisa Ann Harvey , Phd
Researcher , Rehabilitation studies , University of Sidney , Australia

Dctr Charlotte Kiekens
Head of Rehabilitation Unit , Pellenberg , Leuven – Belgium

Dctr Hans Slootman
Spinal Cord Unit department , Heliomare , Wijk-aan – Zee , Netherlands

Professor Dieter Loechner - Ernst
Head of Urology , Spinal Cord Injury centre , Murnau , Germany
Mstr Shivjeet Raghav
Peer counsellor , Indian Spinal Injuries Centre – New Dehli – India

Professor Douglas Brown
Director Victorian Spinal Cord Services , Melbourne – Australia

David Constantine
Chief Executive Officer, Motivation Charitable Trust, UK

Eric Weerts
Program Co-ordinator, HI Belgium and ASCoN Chairperson 2005

Mister Stephen Muldoon
Regional Programme Co-ordinator, Livability ,Ireland

Miss - Maggie Muldoon
Secretariat ASCON – Livability - Ireland

ORAL

ABSTRACT

PRESENTATIONS

Title of Abstract:

The Do's and Don'ts of Accessible Lodging: Guidelines for the Rehabilitation Specialist

Author(s): Please underline the presenting author: Aaron Vamosh

Topic: Please underline

Comprehensive Management

Prevention

Free Paper

Type of presentation: please underline

Poster presentation

Oral communication

Both

Power Point Presentation and lecture

Main Institution where the work was done: Not applicable

Objective:

To show, from the perspective of a wheelchair-user, wheelchair-travel expert, and organizer and manager of handicapped sports events, the need scrutinize the application of architectural and interior design specifications with regard to the lodgings of wheelchair users. This need arises because in implementing guidelines, architects and consultants either have not applied the specs or have misinterpreted them because they do not always understand the mobility challenges wheelchair-users face in such facilities.

Methods:

Over the past 20 years I have led tours of wheelchair-users to a number of countries including Thailand, China and Viet Nam, Scandinavia and North America. I have also toured in Myanmar, Cambodia, Laos, Singapore, most of the European countries, North America, Australia, Fiji, South Africa and Kenya.

In recent years I have photographed and measured various elements of accessibility in hotels and sports centers. These photographs show specific instances of misinterpretation of accessibility guidelines and misunderstanding of the needs of wheelchair-users. This paper is a PowerPoint presentation of the photos and discussion of these design and implementation issues with suggestions for improvements.

Results:

This paper presents empirical data and thus this aspect is not applicable.

Conclusions:

Rehabilitation professionals are looked up to as specialists in all the needs of handicapped people. As such, these professionals are often the "first line of consultation" for the newly handicapped or organizers of events and lodging for wheel-chair users. This presentation aims to sensitize rehabilitation professionals to these issues.

Title of Abstract: Empowering Person With A Physical Disability through Sports

Author(s): CHITRA KATARIA

Topic: Comprehensive Management

Type of presentation:Oral communication

Main Institution where the work was done: INDIAN SPINAL INJURIES CENTRE, NEW DELHI, INDIA.

INTRODUCTION: To identify the effectiveness, number of participation, roles and barriers for wheelchair sports, rehabilitation protocol for active wheelchair users during their participation in various wheelchair sports activities at ISIC. The main objectives were:

- **Get Well**
- **Live Well**
- **Stay Well**

Benefits of Wheelchair Sports:

- Improve Physical Abilities
- Promote Greater Self-Reliance
- Enrich the Quality of Life
- Manage Stress

- Community Re-Integration

Role of a Physiotherapist in Wheelchair Sports:

- To be knowledgeable of the individual's primary disability.
- To assist in their safe participation in sports for the achievement of athletic goals

Barriers to participation in Wheelchair Sports:

- Family participation
- Absence of facilities
- Participant issues
- Environmental conditions
- Lack of time
- Cost factors
- Absence of trained staff
- Difficulties with transport
- Apprehensions
- Lack of money
- Community barriers

SETTING: Rehabilitation Department and Sports Department at ISIC. Tracks are used for sports activities such as wheelchair drills or racing and other track events. Multipurpose Court used for wheelchair lawn tennis, wheelchair table tennis and wheelchair rugby game sessions. Games such as Volley ball (on or off the wheelchair) are played on green lawn.

CONCLUSIONS:

Emergence of Wheelchair sports is new in India. However, since it promotes an overall recovery of the patient as a whole, hence must be included as a part of the normal rehabilitation programme in treatment of patients with Spinal Cord injury. Wheelchair Sports training can bridge the gap between Passive and active rehabilitation.

Title of Abstract: TYPICAL PATIENT WITH SCI AT C6A.

Author(s): Please underline the presenting author: **HO THI THU HA**

Topic: Please underline

Comprehensive Management

Prevention

Free Paper

Type of presentation : please underline

Poster presentation

Oral communication

Both

Main Institution where the work was done: Da Nang city Rehabilitation hospital

Working and participating in so many training courses hold at DaNang Rehabilitation Hospital under the sponsor of Handicap International(HI), We have opportunities to apply these techniques for SCI management. Given on one case of patient with SCI at C6A achieved good outcomes we would like to share the learning lesson on the interdisciplinary approach which is very effective for providing a comprehensive care to patient with SCI.

Objective:

To share and exchange the experience among spinal units and rehab facilities for SCI patients.

Methods:

Results:

The patient can reach the highest capacity for integrating back into society

Conclusion:

By the interdisciplinary approach, the team has taken an important role in providing a comprehensive management for patient with SCI, helping them have a better integration into community and partly releasing the burden on the shoulder of family and society.

Abstract title:

ASSESSMENT THE RESULT MOBILITY'S TREATMENT OF SPINAL CORD INJURY PATIENTS

Authors: MHS.Dr. Nguyen Thi Kim Lien

Topic: Comprehensive Management

Type of presentation: Power Point Presentation and lecture

Main Institution where the work was done: Bach Mai Hospital- Rehabilitation Department

Introduction:

Spinal cord injury after trauma has a lot of sequels, especially the sequel of movement which effects the patients mobility seriously. Mobility is one of the main functions to evaluate the independence of patients. Mobility plays role in daily living activities and social work. So that, it is very necessary for the mobility rehabilitation in spinal cord injury after trauma to help patients intergrating with their family and community soon.

Objective: (1). To determine the related factors with the mobility of spinal cord injury patients after trauma. (2) Assess the result mobility's treatment of spinal cord injury patients after trauma.

Materials and methods: Describable, prospective, interventional study in 54 patients have mean age 36.2 years were followed for one month from 10/2006 to 9/2007.

Result and conclusion: Related factors with the mobility of spinal cord injury patients after trauma are spinal operation ($r = -0.53$) and ASIA impairment scale grade ($r = 0.51$). At the end of treatment and rehabilitation, the patient's mobility is recovered clearly ($p < 0.01$).

Title of Abstract:

Transferring spinal cord injury management and rehabilitation techniques to provincial units

Author(s): Dr Tran Minh Dong

Main Institution where the work was done: Ho Chi Minh City Spinal Cord Unit

Abstract Text:

Founded in 2003 under the support of Handicap International Belgium, Ho Chi Minh City Spinal Cord Unit is the first unit providing management and rehabilitation for patients with spinal cord injury in Vietnam. In order to enlarge the network of this service, the unit had carried out the transfer programme in 6 provinces in Vietnam from 2006 to 2007 (also under the continuing support of Handicap International Belgium).

Objective: Training and transferring the spinal cord injury management and rehabilitation to the newly established units in Vietnam.

Methods: The activity of interdisciplinary team

Results: We have established 3 units of comprehensive spinal cord injury management and rehab in Khanh Hoa, Phu Yen and Da Nang, which will play as the foundation for the extension to 3 provinces in the North as follows Bac Giang, Thanh Hoa and Hanoi.

Conclusions: At present, Vietnam is ready for implementation and extension of spinal cord injury management and rehabilitation.

How to get the best transfer results:

- Available resources and leader board's consensus and determination.
- Finance.
- The support of professionals from ASCoN, ISCOS

Spinal unit's being an independent administrative unit.

Title: TECHNIQUES TO TREAT PRESSURE SORES

Presenter: Dr Nguyen Ngoc Vuong

Main institution where the work was done: Spinal Unit - KHANH HOA hospital for nursing and rehabilitation

Objective: -To reduce both the hospital stay and the cost of treatment for SCI patients

-To improve the pressure sores treatment on paralysed and SCI patients.

Methods: -Report based on clinical evidence

Result: - Pressure sores become healed during three weeks

Conclusion: It is easy to perform successfully suturing technique without complicated tools.

Title of Abstract: Identify the influencing factors of hopelessness of people with spinal cord injury in the Community

Author(s): Please underline the presenting author: Md. Abdul Zabbar

Main Institution where the work was done: Centre for the Rehabilitation of the Paralysed (CRP) – Ex-patients of CRP in the community.

Introduction:

Spinal Cord is a traumatic, which typically occurs suddenly and without warning. It has an immediate impact on all areas of individual's physical & psychological (Kranse & Crewe 1991 b). People with spinal cord injuries face not only substantial physical hardship but also psychological and social adjustment to having such a catastrophic; life- changing injury can be equally overwhelming.

Objective:

1. To know severity and influencing factors of hopelessness
2. To identify the better resources for minimizing hopelessness in the community.

Design: It was a mixed design (quantitative and qualitative approach).

Subjects: Total 50 SCI subjects were selected for interview as convenient sampling procedure. Among them 29 subjects were traumatic paraplegia and 21 were traumatic tetraplegia, age range 17 years to 41 years and average age was 34.5 years and male female ratio was 1.38:1 who were completed rehabilitation program, using wheelchair and living in the community.

Study period and Setting: June'2008 to August'2008. The subjects were taken from ex-patients of CRP those who are living on wheelchair in the community

Methods data collection:

An interview for each subject carried out. The data collected in one time from each subject by using Beck Hopelessness Scale (BHS). BHS consist 20 structured questions and used as semi structured method and taken each questions answer's qualitative explanations from each subject .

Data Analysis: Data was analyzed by descriptive analysis and descriptive coding method.

Role/Powerless(CR) and Teasing as indicated the major influencing factors of the hopelessness in the community.

Results: Result shows people with SCI living on wheelchair in the community the percentage of hopelessness scores for Normal level = 26%, Mild = 32%, Moderate = 22 %, and Severe = 20 %. Results also noticed that among the 50 people with SCI Inadequate Architecture (IA), Caregiver Burnout CB), Negative Social Attitude (NSA), Lack of Available Health Support LAHS), Financial Crisis (FC), Inadequate Family Support (IFS), Lack of Friendship ness (LF) Lack of Recreation (LR), Changing

Role/Powerless(CR) and Teasing as indicated the major influencing factors of the hopelessness in the community.

Conclusions: People with SCI need special treatment because it is such disability that needs other supports and helps for alive. Active participation in therapies and recreational activities, available health support, accessible environment, involvement peer support, awareness rising on public policy, alternative support services, new coping strategic and counselling is an important source of this support which are provided overall adjustment to SCI and being a productive member in the community.

Title of Abstract: Functional outcomes of patients with Spinal Cord Injury (SCI) at the Halfway hostel of the CRP in Bangladesh.

Author(s): Please underline the presenting author: Md. Shariful Islam

Co-author: Md. Ehsunul Ambia

Main Institution where the work was done: Centre for the Rehabilitation of the Paralysed (CRP), Bangladesh

Main Institution where the work was done: Centre for the Rehabilitation of the Paralysed (CRP), Bangladesh

Aim:

To explore the functional outcomes of patients with Spinal Cord Injury (SCI) at the Halfway hostel (Community reintegration hostel) of the CRP in Bangladesh

Objectives:

- To measure the functional outcomes for patients with paraplegic and tetraplegic SCI at the halfway hostel.
- To explore the views of the patients who have been discharged from hostel about the functional outcomes in the hostel.

Methods:

A mixed design was chosen to conduct the study. In the quantitative part, the functional outcome was measured from the total modified Functional Independence Measure (FIM) score administrated at admission to hostel and at discharge from the hostel. Following Purposive Comprehensive sampling a retrospective survey of 203 patients (from January to September 2008) was conducted through reviewing their assessment forms.

On the other hand, 5 patients living in the community (following discharge from hostel) were interviewed using face to face semi-structured interview. Patients were selected using convenience sampling in this regard. Data from the quantitative part was analyzed using descriptive statistics whereas content analysis was chosen for the qualitative part.

Results:

On average, a 15% improvement in FIM scores (from the FIM score administrated at admission to half way hostel) of the paraplegic patients was noted. However, the improvement of the tetraplegic patients was only 3%. The paraplegic patients living in the community acknowledged their improvement of functional outcomes in transferring and domestic activities of daily living from the halfway hostel. They consider the hostel as a place to build confidence in independent functioning. Tetraplegic patients did not find any functional difference living the hostel but they consider 'early alertness of functional challenges' as an outcome of their time in hostel.

Conclusion:

The findings of the study justify the importance of halfway (community reintegration/ transit) hostel as part of SCI rehabilitation centre.

Title of Abstract:

Spinal cord lesion in Bangladesh: A descriptive study at a rehabilitation center-2008

Author(s): Habib, Md Monjurul

Main Institution where the work was done:

CENTER FOR THE REHABILITATION OF THE PARALYSED (CRP)

Objective:

To identify and analyze demographic and socioeconomic, characteristics of patients with spinal cord injury in Bangladesh and critically asses their clinical and rehabilitative status so as to contribute to develop more effective preventative and rehabilitative policies and programs.

Methods:

This study was done using a mixed method approach. A sequential mixed method (Quan-Qual) approach was considered to be appropriate considering the fact that the area is so far under explored in Bangladesh. The study was conducted in Centre for the Rehabilitation of the Paralyzed (CRP) as CRP is the only specialized rehabilitation centre for Spinal cord lesion in Bangladesh.

The study population consists of patients with Spinal cord lesion coming to CRP for their treatment and rehabilitation. For the quantitative part of the study 270 patients were selected from the medical records of CRP from among the patients who were discharged between January 2008 and August 2008. For in-depth interviews 10 subjects were selected purposively representing at various stages of rehabilitation, severity of lesion, and type of paralysis to ensure richness of information. Striking a gender balance was also a consideration.

Quantitative data was collected by document review using check list from medical records retrospectively.

Qualitative data was collected by in-depth interviews with patients using interview guide. Final transcript was made the same day of data collection.

Quantitative data was analyzed using tools of both descriptive and inferential statistics. Content analysis of qualitative data was done to describe the phenomena. From the transcript codes were developed to get categories. And from the categories themes were made. The process was carried out manually. For the in-depth interview verbal informed consent was read out to the participant to get consent.

Results:

Of the 270 subjects with Spinal Cord lesion who were part of the study, an overwhelming majority (88%) were males and also sole earning member (87%) of their family. They mostly earned their livelihoods by manual labor (27%) or farming (27%). Mean income was Taka 3102 (SD 1860.62). After accident/onset of spinal cord lesion the patients came to the rehabilitation centre on average after 75 days. Although the mode of transportation used to arrive at CRP varied, ambulance was most frequently (51.2%) used mode.

Among the participants the average lengths of stay in the rehabilitation centre was 90.45 days. The association between time elapsed before coming to CRP and severity of neurological loss was found significant in the Pearson's chi-square test, with a *p* value of .005 (two sided). Among the subjects under study 75% needed conservative management of their SCL while 24.3% patients needed surgery.

For 84% of the participants the cause of spinal cord lesion was traumatic. Most common traumatic cause of spinal cord injury was found to be "fall from height" (50.2%). Most common non traumatic cause of Spinal cord lesion was Tuberculosis of the spine (TB spine) (54.8%).

Among the participants 61.4% were paraplegic. According to ASIA impairment scales on admission a majority (63.6%) of patients were complete A. It was found that patients with neurological level B had maximum improvement in their SCL status at the time of discharge. The mortality rate during treatment at the CRP was 9%. Among the patients who died most of them were males (92%), traumatic (91%) and tetraplegic (87%). Among the study participants 22.7% could walk independently and 44.3% were independent in wheelchair. Non traumatic patients were found to have better recovery in compared to traumatic patients. Among the study participants only 28% returned to old jobs.

On discharge average improvement in functional independence score was 95. The association between type of lesion according to cause and improvement in FIM score was found significant in the Pearson chi-square test; with a *p* value of .004 (two sided).

Title : Use of urodynamic assessment system at HRPD – District 8 – HCM : an overview of practice and results

Author(s): Dr Bui Thi Lan Vi

Main Institution where the work was done: HoChiMinh City Spinal Cord Unit

Objective : This short abstract aims to present the experiences gained from assessing SCI patients with neurogenic bladder by using a urodynamic assessment system

Methodology :

While managing comprehensively SCI patients at the HRPD , the overall assessment and treatment planning needs a clear component of paying attention to the patient with a neurogenic bladder as this is known to be one of the main causes of mortality among patients with SCI in Vietnam.

Using one channel water cystometry , next to a clinical questionnaire allows already significant indication on diagnosis of the neurogenic bladder. In the long term , the clinical image of the neurogenic bladder can change and more indepth knowledge need to be available in the SCI referral centres.

Results :

In 2005 , the HRPD acquires a urodynamic assessment system that enabled to measure filling and voiding volumes as well as electro- myographic activity of the bladder.

This was needed to respond to the rising needs in number of patients requiring more indepth study of their bladder .

Conclusion : although one channel water cystometry provides significant information for the SCI patient to start his treatment , it is necessary to have access to urodynamic systems . Economic concerns need to be taken into account in order to keep this assessment system financial available for the patients

Title of Abstract:

Factors influencing shoulder pain in paraplegic wheelchair users at CRP in Bangladesh.

Author(s): Please underline the presenting author: Mst. Fatema Akter

Co-author: Mohammad. Anwar Hossain

Main Institution where the work was done: Centre for the Rehabilitation of the Paralysed (CRP), Bangladesh

Objectives:

To explore factors influencing shoulder pain in paraplegic wheelchair users at CRP in Bangladesh.

Methods:

A quantitative survey was carried out at the Centre for the Rehabilitation of the Paralysed (CRP) between January and June 2003. A convenience sample of 30 wheelchair users with shoulder pain was selected, their age range between 15-50 years and among them male participants 13, female 17 who were using wheelchair minimally 1 year. The survey consisted of 11 closed ended questions which assessed the patients shoulder pain and aspect related to wheelchair use. Another 6 questions measuring the intensity of shoulder pain during functional activities using the visual analog scale.

Results:

Heavy weight wheelchairs, long duration wheelchair use, wheelchair use on rough surfaces and old age wheelchair users were factors related to increase level of shoulder pain. However, there was no relationship between shoulder pain and years of wheelchair use.

Conclusion:

The study was identified certain factors which are related to shoulder pain in paraplegic wheelchair users. Interventions aimed at improving those factors such as light weight wheelchair, regular exercise programme, technique of wheelchair propulsion and maintain balance between wheelchairs propel time and rest may result in decreased shoulder pain. Further research is required to determine if a causal relationship between shoulder pain and the identified factors exist.

Title of Abstract:

Tuberculosis of the Spine in Bangladesh: The current scenario.

Author(s): Please underline the presenting author: Dr. Sayeed Uddin Helal (Resident Medical Officer, CRP), Mst. Reshma Parvin Nuri (Research Associate, CRP)

Main Institution where the work was done: Center for the Rehabilitation of the Paralysed (CRP).

Background:

Tuberculosis is the most common cause of infection related death worldwide. Spinal tuberculosis is the commonest form of bone and joint tuberculosis. It causes some devastating complications especially paraplegia that has a great effect on personal, conjugal and social life of human being. Spinal tuberculosis is therefore a major health problem in developing countries like Bangladesh. In our socio-cultural aspect women suffer more complicated life than men with spinal TB.

Objective:

To review the current scenario of TB Spine at Centre for the Rehabilitation of the Paralysed (CRP).

Methods:

A retrospective review of all patients with TB Spine admitted into CRP from 2003-2008 was carried out. The history, clinical as well as radiological features and treatment method were analyzed. The diagnosis was based on clinical, pathological, MRI or FNAC procedures.

Study tools:

Medical record books, semi structured questionnaire, literatures.

Results:

A total of 79 patients with TB Spine were admitted during the study period out of which male 41(51.9%) and female 38(48.1%) comprising male-female ratio 1:1.07. The age range of the patients was 15-65 years for male with a mean age of 36.73 year \pm 16.1 SD and 12-80 years for female with mean age of 31.02 year \pm 17.5 SD. Housewives were the most affected group among the female patients.

Back pain (66.66%) and weakness of lower limbs (61.9%) followed by incontinence (23.8%) were the commonest presenting complaints.

On the contrary in our study we found that in case TB spine female did not seek treatment until they developed paralysis with impairment of bowel and bladder function. And all most all cases that came for seeking treatment are labeled with paraplegia, not with TB spine. As the features of the TB spine were not alike that of PTB, women with TB spine fall in the trap of diagnosis delay. They were diagnosed only after admission into CRP on the basis of clinical, pathological, MRI or FNAC procedures. This is definitely a distinct picture for women with TB spine, from women with PTB in treatment seeking behavior. We saw that most of the married female patients were brought to CRP by their parents or relatives, not by their spouse. On the contrary married male patients came with their spouses. Negligent by the spouse, another marriage and divorce play the causal role in developing this scenario. All the patients were initially treated medically with Anti TB or Koch's therapy after admission. Out of them 44.3 % (total 35) patients were undergo surgical intervention for biopsy, abscess drainage and decompression.

Conclusion:

The study strongly suggests that there was a treatment seeking delay in TB spine due to fall in the trap of diagnosis delay. We suggest more research into the health care seeking chain in order to identify the specific steps where TB spine diagnosis especially for women may be delayed. The outcome of the modalities of management presently available is unsatisfactory. There is need to improve the facilities for spinal surgery so that our patients can maximally benefit from a combination of surgery and chemotherapy. Based on this study finding, we recommend developing an appropriate gender strategy for developing a TB spine control program, comprised of operational, socio-cultural and community awareness interventions aimed at preventing the possible social and conjugal damage to the women with TB spine.

Title of Abstract:

Barriers to exercise for individuals with Spinal Cord Injury: An Indian Perspective

Author(s): Please underline the presenting author: SHEFALI WALIA, JASKIRAT KAUR

Main Institution where the work was done:

INDIAN SPINAL INJURIES CENTRE, NEW DELHI, INDIA

Objective: Physical activity participation among people with spinal cord injury and other disabling conditions is substantially lower than in the general population. Several reports have noted that a sedentary lifestyle can precipitate functional decline in persons with spinal cord injury that limits his or her ability to work, recreate and engage in community events. Benefits of exercise in improving outcomes after Spinal cord injury are increasingly recognized. However, despite the salutary effects of exercise on the overall health of those with Spinal cord injury, there are physical and psychological barriers preventing them from participating in a fitness program and reaping its benefits.

Identification of barriers to exercise among individuals with spinal cord injury is the first step to reducing such barriers to facilitate participation in exercise and improve health outcomes. The purpose of this study was to describe barriers to exercise among individuals with Spinal Cord injury. In addition, identify differences in exercise barriers between those with paraplegia vs. tetraplegia.

Methods: Sample: A survey of barriers to exercise was administered to 50 individuals with Spinal cord injury who fulfilled the inclusion criteria.

Outcome Measure: Barriers to physical exercise and Disability Survey

Results: Awaited

Conclusions: Awaited

Title of Abstract: Bladder Care of SCI patients at CRP: Exploring better management.

Author(s): : Teresa Rozario , Sunil Tarufther , **Dr. Mostafa Kamal**

Main Institution where the work was done: Centre for the Rehabilitation of the Paralysed (CRP), Bangladesh

OBJECTIVE:

To elucidate better bladder management of spinal cord injuries at CRP.

METHODS:

An experimental study was conducted at CRP on 30 patients. This study was performed in September-October. For the control group we chose 15 patients (Male: 13 Female: 2) and for the study group we chose same number in same male and female ratio.

This study was an experiment. The control group, who would usually drink more than 2litres per day and also perform clean self-intermittent catheterization as necessary as per CRP protocol. The study group was advised to drink a maximum of 2 liters and perform self-catheterization every 6 hours. We aimed to record any complications arising from this experiment.

RESULTS:

The results show that complications such as UTI, and clean interriment self-catheterization were the same. However, the study group reported more complaints when they were required to drink only 2 liters of fluid and perform clean self-catheterization every 6 hours.

CONCLUSION:

For SCI, the patient's bladder management is of vital importance for their effective nursing management. As the study shows, in the context of Bangladesh, the CRP method of 'unlimited fluids an clean catheterization as required' is more effective than other recommended.

Title: URINARY TRACT MANAGEMENT FOR PATIENT WITH SCI

Author: Huynh Phan Minh Thuy – PT

Main institution where the work was done: Spinal Unit- Da Nang hospital for nursing and rehabilitation

Introduction:

Over the last two years, based on the gathered experience, we have found that good urinary tract management helps to reduce urinary tract infection(UTI), prevent complications and improve patients' lives. So we, the multidisciplinary team, always pay more attention to UT management than bowel and skin care or respiratory management with the aim to raise their confidence to integrate into the community along with the management cooperation of physicians, occupational therapists, physical therapists, social workers, peer counsellors and equity fund. Under the support of Handicap International in aspect of finance and expertise, we have applied our clinical knowledge on UT management for SCI patients and also obtained some achievements. By the abstract "URINARY TRACT MANAGEMENT FOR PATIENT WITH SCI" we wish to share the experience as well as update the information on SCI management from domestic and regional hospitals to make more progress in SCI care mission.

Objectives:

- To reduce UTI ratio.
- To get more confidence for community return.
- To improve SCI patients' life quality

Methods:

Retrospection on the number of patients admitted to hospital for SCI care and rehabilitation.

Results: (Since the setting up of spinal unit)

Bladder pressure management: 112 patients.

Intermittent catheterization perform: 67 patients.

Urinary tract recovery: 33 patients.

Catheterization at home: 34 patients including 26 males and 8 females.

Conclusion:

- Urinary tract rehabilitation for SCI patients is very important. The combination of treatment methodologies results in better outcomes.

- SCI patients should be educated how to take care of their urinary tracts to avoid complications as well as to get more confidence for community return and fight against disabilities.

Tilt: EVALUATION ON SCI REHABILITATION OUTCOMES OF KHANH HOA HOSPITAL FOR NURSING AND REHABILITATION

Presenter: TRAN THI NHU NGOC – Doctor

Main institution where the work was done: KHANH HOA HOSPITAL FOR NURSING AND REHABILITATION

Objective: To evaluate the SCI rehabilitation combined with oxygen decompression treatment.

Methods:**Results:** Before/ after treatment:

- Mobility- Sensation (ASIA)
- Psychological status .
- Independent Capacity
- Integration Capacity.
- Life quality
- Recommendation.

Conclusion:

Setting up a spinal unit in combination with oxygen decompression chamber will help to eliminate consequences caused by spinal cord injuries.

Title: A Prospective Study To Evaluate Sexual Problems in patients with Spinal cord injury

Author(s): Naveen Mathew Jose, Senior Resident, **Dr SL Yadav, Associate Professor**, Dr U Singh, Professor & Head Department Of Physical Medicine & Rehabilitation AIIMS, New Delhi

Main institution where the work was done: Department Of Physical Medicine & Rehabilitation, AIIMS, New Delhi

Spinal cord injury (SCI) is one of the most catastrophic injuries because of its multi-system involvement. In any spinal cord injury rehabilitation set up, patients present with many a problem to be taken care of. Sexuality and concerns about it are some of those issues that are often ignored or left for the future. There is a scarcity of literature on sexuality in Indian patients with SCI. Health care professionals in India are ignorant about their role in sexual rehabilitation of their patients. This study was conceptualized in order to have a better understanding of the sexual problems faced by patients with spinal cord injury. A total number of seventy-six (76) subjects (66 male and 10 female) with SCI satisfying the inclusion criteria were enrolled in the study conducted in the dept of PM&R between 1st July 2004 and 31st December 2005. It was a cross sectional study using a questionnaire and semi structured interview. We found that SCI affects the most productive age group in our country. The longer the time since injury, the more likely a SCI patient was to have sexual activity. Married SCI patients were more likely to have physical relationship. Many Indian couples remain married despite the inability to have coitus. Favorable sexual outcome was seen in lower level SCI and incomplete SCI. Absent sexual activity was related to prolonged hospital stay and the fear of aggravating the SCI.

Title: STUDY ON THE COMMON CHARACTERISTICS OF PATIENTS WITH CERVICAL SPINAL CORD INJURY

Presenter: MA Duong Dai Ha

Main institution where the work was done: Neurologic Surgery- Viet Duc Hospital

Objective: To present the most common symptoms of cervical spinal cord injuries and the importance role of rehabilitation for people with SCI.

Method: Prospective study method

Result: Survey 91 patients(males occupied 85%), the average age: $41,47 \pm 15,324$ (5-74), 41-50 years old occupied 30,9%.

The common causes: traffic accidents occupied 40,3% (61,9% without helmet wearing); labor accident 33,9%.

Common profession: farmer 53,2%; freelance worker 14,5%.

Most of victims get the first aid at medical facilities: 72,6% (including 8,1% without cervical vertebra fixation during transport).

At the time of admission, 58,1% patients with skeletal injuries but 45,2% diagnosed to get operation. The average time of operation: $2,96 \pm 2,473$ (1-10). 81,1% patients with spinal cord injury but only 26,8% patients are done examination to identify how their spinal cord damaged.

Patients' injury status: ASIA A: 40,3%, ASIA E: 14,5%. Respiratory failure: 9,6% (including 3,2% of respiratory failure after operation)

Conclusion:

Most of patients are male and young, main labor resource in their family. Applying the first add in an unappropriate way might cause secondary consequences for spinal cord of patients. The number of patients get

operation occupied 45.2%. It is said that the management and rehabilitation for people with SCI especially at the cervical level is till weak and less attention currently.

Title: SURVEY OF PATIENTS WITH SPINAL CORD INJURY AT PHU YEN HOSPITAL FOR NURSING AND REHABILITATION.

Presenter: Truong Thi Xuan Thuy- Doctor

Main institution where the work was done: PHU YEN HOSPITAL FOR NURSING AND REHABILITATION.

Introduction

Within the scope of five-year project(2003- 2008) at Ho Chi Minh Hospital for nursing and professional diseases financed by Foreign Affairs of GD of Luxemburg and Handicap International Belgium, the model of comprehensive management for patients with spinal cord injury has been implemented along with the application of international guidelines and techniques for spinal cord injuries. Since 2006, this model has been conducted in three central provinces(including Phu Yen Hospital for nursing and rehabilitation) through technique transferal, medical equipment supply and setting up spinal unit.

For two years, we have received 75 admissions to hospital after acute management. After the patients finish their rehabilitation management and discharge from hospital, we will follow up and evaluate their capacity of community integration in two years' time.

Objective:

To evaluate medical status and recovery capacity of patients with spinal cord injury at Phu Yen Hospital for nursing and rehabilitation.

Method:

- Descriptive retro-spection
- Data collection through medical record

Result:

1. Distribution of patients based on sex and age
2. Geographical zone
3. Causes of injuries
4. Classification of injuries: complete and incomplete injuries.
5. ASIA Score at the time of admission:
*ASIA Score for cervical spinal cord injury
* ASIA Score for thoracic spinal cord injury
* ASIA Score for lumbar spinal cord injury
6. Improvement Scale according to ASIA
7. Medical complications

Conclusion:

At Phu Yen Hospital for Nursing and Rehabilitation, the application of comprehensive management on 75 cases of spinal cord injury has resulted in less complications and after- effects in spite of uninterrupted follows-up.

If the patients with spinal cord injury get the early intervention and proper method, the outcomes will be better with less complications and disorders as well as less secondary consequences. It is possible that they can perform the remaining function and the daily activities with the best independence capacity.

The ultimate goal of the rehabilitation process is that the patients with spinal cord injury are able to return to the community and enjoy the rest life with disabilities. So, it is important for the patients to get counselling and motivation from family and community to overcome their disabilities and integrate into the community

Title of Abstract:

Effect of Occupational Therapy on independent of spinal cord patients with ASIA: T2A – L1A

Main Institution where the work was done: HoChiMinh City Spinal Cord Unit

Objective: To evaluate independence of patients with ASIA T2A-L1A through applying effectively occupational therapy

Design: retrospective Cohort study.

Setting: Ho Chi Minh City Spinal Cord Unit.

Participants: A total of 53 subjects (42 male and 11 female) ranging in age from 15 to 57 years.

Method: We used the residents of HCM Spinal Cord Unit, Vietnam. We searched a database of medical records made between 2006 and 2008 and found 53 residents who had a diagnosis of ASIA: T2A – L1A. We reviewed patients' records to collect gender, age, duration in hospital and exercise in ward, ASIA score, independent level, multi-trauma, complications, and economic condition.

Results:

- Ability physical independence of patients had improved better with occupational exercise.
- Sex ($P<0.05$); Duration exercise ($P<0.05$) were to have positive correlations and multi-trauma factor ($P<0.001$) were significantly positive correlation.

Conclusions: The Occupational therapy play important role in rehabilitation the independent for spinal cord injury patients with ASIA T2A – L1A. Further study is needed to determine its usefulness in various clinical settings.

Title of Abstract: Prevalence anxiety and depression in spinal cord lesion patients and related factors

Author(s): Please underline the presenting author:

Kovindha A, Attawong T, Rukpong-asoke B, Sujichai J, Buagnern S.

Main Institution where the work was done:

Department of Rehabilitation Medicine, Faculty of Medicine, Chiang Mai University

Objective: to report prevalence of anxiety and depression in Thai spinal cord lesions (SCL) patients and factors related to anxiety and depression.

Methods: SCL patients aged > 18 years admitted at Rehabilitation Ward, Maharaj Nakorn Chiang Mai Hospital were recruited into the study. They were asked to complete the Hospital Anxiety and Depression Scale (HADS) questionnaires. ISCOS demographic dataset were collected. Prevalence was reported as percentage and related factors were analysed by using Pearson correlation.

Results: There were 135 SCL patients: 63% males; mean age 42.8 years ($SD=1.34$); 39.3% new patients; 13.3% complete tetraplegia, 31.1% incomplete tetraplegia, 36.3% complete paraplegia and 19.3% incomplete paraplegia). According to anxiety, 62.2% had score < or = 7 (no anxiety), 26.6% score 8-10 (anxious but no treatment needed) and 11.1% score > or = 11 (anxious and need treatment) (mean anxiety score $6.44 +/-3.70$, min 0, max 19, mode 7). According to depression, 66.7% had no depression, 17% depressed but not need treatment and 16.3% depressed and needed treatment) (mean depression score was $6.47 +/-3.70$ (min 0, max 17, mode 5). Anxiety was related with depression ($r = .608$, $p < 0.001$) and pain ($r = .247$, $p = 0.004$). Depression was reversely and weakly related with SCIM score ($r = -.193$, $p = 0.025$) and directly and weakly related with age ($r = .207$, $p = .016$).

Conclusions: Anxiety and depression was prevalent among Thai spinal cord lesion patients but few needed treatment. Anxiety was moderately related to depression but had weak relation with pain while depression was related with aging and functional limitations.

Title of Abstract: CARPAL TUNNEL SYNDROME IN PARAPLEGIC WHEELCHAIR USERS

Author(s): Please underline the presenting author:

Montana Pukahuta, Siam Tongprasert, Apichana Kovindha

Main Institution where the work was done: Department of Rehabilitation Medicine, Maharaj Nakorn Chiang Mai Hospital, Chiang Mai, Thailand

Objective: To identify the prevalence of CTS and possible factors related to the development of CTS in Thai paraplegics.

Methods: Thirty-six paraplegic wheelchair users were interviewed for demographic data, pattern of wheelchair use and clinical history of carpal tunnel syndrome (CTS). Physical and electrodiagnostic examinations were done to confirm the presence of CTS. Wrist dimension ratio (WDR) was measured; WDR value > 0.66 is considered as a predisposing factor for CTS. Qualitative data were analyzed with chi-square test, quantitative data with independent sample T-test and Mann-Whitney U test.

Results: There were 8 patients (22.2%) with signs and symptoms consistent with CTS, however, 5 of them were confirmed by electrodiagnosis. When electrodiagnostic criteria were used regardless of clinical signs and symptoms, 16 of 36 patients (44.4%) were diagnosed with CTS. None of the possible contributing factors differ significantly between CTS and non-CTS group: duration of injury (10.50 vs. 6.25 years, $p=0.051$), body weight (55.08 vs. 57.06 kg, $p=0.743$), wheelchair weight (19.07 vs. 18.22 kg, $p=0.293$), daily use of wheelchair (7.25 vs. 7.53 hrs, $p=0.841$), push up frequency (2 vs. 4 times/hour, $p=0.342$) and WDR (0.69 vs 0.71, $p=0.914$).

Conclusions: According to electrodiagnostic criteria, CTS is a prevalent disorder among paraplegics. Duration of injury seems to be related to the development of CTS.

Title of Abstract: Pain and sleep disorder in spinal cord lesion patients

Author(s): Please underline the presenting author:

Kovindha A, Attawong T, Rukpong-asoke B, Buagnern S, Sujichai J.

Main Institution where the work was done:

Department of Rehabilitation Medicine, Faculty of Medicine, Chiang Mai University

Objective: To report prevalence of pain and sleep dysfunctions in spinal cord lesions (SCL) patients and factors related to anxiety and depression.

Methods: SCL patients aged > 18 years admitted at Rehabilitation Ward, Maharaj Nakorn Chiang Mai Hospital were recruited into the study. They were asked to assess pain with numeric rating scale (NRS: 0-10) and sleep functions (amount, onset, maintenance and quality), and to complete the Hospital Anxiety and Depression Scale (HADS) questionnaires. Completed ISCOS dataset to gather demographic data, modified Ashworth scale (MAS) to assess spasticity and spinal cord independence measure (SCIM, version 3) for functional assessment. Prevalence was reported as percentage and factors were analysed by using Chi-square and correlations.

Results: There were 135 SCL patients: 63% males; mean age 42.8 years ($SD=1.34$); 44.4% tetraplegia; 49.6% complete lesion and 39.3% new patients. According to NRS for pain, 39.3% rated pain as 0, 29.6% rated 1-4, 30.3% rated 5-9 and 0.7% rated 10; median pain score was 3 (min 0, max 10, mode 0). According to sleep functions, 37.8% reported impairment in amount of sleep, 43.7% in onset of sleep, 48.9% in maintenance of sleep and 29.6% in quality of sleep. Anxiety was significantly related with pain ($r = .227$, $p = .008$) and with all components of sleep (amount $p=.000$, onset $p=0.41$, maintenance $p < 0.001$ and quality $p < 0.001$). Impaired quality of sleep was found more in post-acute rehabilitation than chronic patients ($p = .033$).

Conclusions: One-third of spinal cord lesion patients had moderate to severe pain but nearly half had sleep dysfunctions, mainly impairment of onset and maintenance of sleep, more in post-acute rehabilitation patients. Pain and sleep dysfunctions were related with anxiety.

Title of Abstract: Body weight supported treadmill training versus over ground gait training: A comparative study on the effects of gait performance of motor incomplete spinal cord injury subjects.

Program Book of ASCoN Conference
Date: 9-11 Dec, 2008

Author(s): Please underline the presenting author: MOHIT ARORA, NISHI GUPTA

Main Institution where the work was done: Indian Spinal Injuries Centre

Objective: Body weight supported treadmill training has been used to improve gait, however its effects on gait performance of ambulatory motor-incomplete spinal cord injury subjects has not been compared with that of overground gait training. The purpose of this study was to compare the efficacy of body weight supported treadmill training to the efficacy of overground gait training on the gait performance of motor incomplete spinal cord injury subjects.

Methods: An experimental design (pre-test and post- test) was used in the study. 30 traumatic, motor-incomplete spinal cord injury subjects (ASIA- C,D), age 20- 50 years with at least 6 months post injury duration and ability to ambulate at 10 meters took part in this study. All subjects were randomly allocated to two groups and daily 1 hour of gait training, 5 days a week for 4 weeks was given. Group- 1 (n=15) received 10 minutes of stretching, 30 minutes of body weight supported treadmill training and 20 minutes of overground gait training where as Group- 2 (n=15) received 10 minutes of stretching and 15 minutes of overground gait training. Out come measures were speed and WISCI- II scale.

Results: Gait performance of all subjects improved with gait training, however the effect of body weight supported treadmill training was more then that of overground gait training.

Conclusions and Discussion: Body weight support treadmill training is more effective then overground gait training in improving gait performance of motor incomplete spinal cord injury subjects.

Title of Abstract:

“Three years study of Spinal Cord Injury outcomes and related secondary complications in a tertiary centre –A retrospective analysis”

Author(s): Please underline the presenting author:

Pua P.Y, Leonard J.H, Ohnmar H, Naicker AS, Mohammad AR

Main Institution where the work was done:

University Kebangsaan Malaysia Medical Centre, Kuala Lumpur, Malaysia

Introduction

The purpose of this study is to determine the outcome and occurrence of secondary complications in acute spinal cord injury (SCI) during the in-patient phase.

Materials and methods

The records of all patients (n=357) admitted between June 2003 and June 2006 to spinal ward were reviewed retrospectively.

Results

Of 357 patients, only 77 (58 male, 19 female) who presented with neurological deficits were included in this study. Thirty nine percent of them were between 54-64 years. Motor vehicle accidents (39%) were identified to be the leading cause of SCI. Paraplegia (72.7%) was the commoner resultant outcome. In terms of outcome grading, larger number of subjects were in ASIA D (42%) followed by ASIA C (31.2%), only 5.2% recovered fully. Of the complications, bladder and bowel problems were the most frequent (65%), followed by spasticity (27.3%) and pressure ulcer (26%). Obviously those with tetraplegia were at higher risk for all secondary complications. Mechanical loading was effective in prevention of spasticity in around 70% of cases. The importance of breathing exercises were evident in that 77.4% did not develop pulmonary complications. Although psychological problems had a lower incidence (13%), it could be due to the fact that it was under recognized. Depressive symptoms were the predominant mode of presentation.

Conclusion

This study gives us information on SCI related complications in our centre which then sets a background to look into reducing incidence of urinary problems, pressure ulcer and severity of spasticity and also implementing and improving on SCI care services.

Key words: Spinal cord injury, epidemiology, complications

Title of Abstract: A self-rehab and peer counseling network based in Beijing

Author(s): Please underline the presenting author: Dajue Wang, Jun Wen (presentation is pre-recorded by the first author)

Main Institution where the work was done: Beijing SCI Network

Objective: To introduce a model of self-rehab and peer counseling throughout China.

Methods: (1) A middle-aged male paraplegic of T6C has been learning knowledge and skill of diagnosis, treatment and rehabilitation of SCI by observing these processes in a specialized rehab centre. (2) A flat is rented to take peer sufferers for self-rehab. Basic PT, OT and ADL equipment are installed for the purpose. The flat is fully wheelchair accessible. (2) Passing his knowledge, skills and experience to peer-sufferers via mail and internet. (3) Computing is compulsory part of in-house training. (4) Consulting experts of the rehab centre and other institutions and passing knowledge and skills on to peer-sufferers via mail and internet. The experts include national and international ones. This includes organizing lectures and questions and answers audio-visually on the internet. (5) Helping ordering, purchasing and delivering wheelchairs and aids to peer-sufferers. (6) Organizing regular social activities. (7) The social activities reached a climax by collectively climbing up the Great Wall in May 2008. This was unprecedented for Chinese wheelchair users since China's First Emperor who built the Wall. (8) The service is non-profitable.

Results: Thousands of SCI persons have been benefitted from the service throughout China. Twenty nine para and tetra plegics have received in-house service. **None was fully independent before admission but almost all become so at discharge from the Network except a high tetraplegics.**

Conclusions: The Network is a cost-effective model of community based SCI comprehensive management not only for developing but also for developed countries.

Acknowledgement: The authors would like to thank ISCoS, Irish Aid, Livability, Nissin, Huici and Taimeng Tech for their kind support that has made the Network and its work possible

Abstract title: TREATMENT FOR CHILDREN WITH CEREBRAL PALSY BY BOTULINUM TOXIN TYPE A (DYSMINT®)

Author: Dr. Truong Tan Trung

Main Institution where the work was done: Medical University-Ho Chi Minh

Introduction Cerebral palsy commonly seen in children is a motor disorder which affects approximately 2.5 to 4 per 1000 of living births in the United States. In Vietnam, the Children Hospital 1 (Ho Chi Minh City) has admitted about 1,300 children with cerebral palsy in 2002; 1,141 patients in 2003; and 208 patients in the August 31, 2004, among them 39 (18.9%) were reported to be successfully rehabilitated with good results.

These figures indicate that muscle spasticity in children with cerebral palsy is a frequently seen clinical entity, but optimal supportive treatment in conjunction with physical therapy is far to be selected. Motor disorders with muscle spasticity in cerebral palsy usually would not be aggravated providing that an appropriate and active regimen of physical therapy is undertaken.

Patients and methods This is a cross-sectional descriptive study included of 36 of 50 ambulatory cases of spasticity in cerebral palsy of children who were admitted at the HCMC Hospital for Traumatology and Orthopaedics between August 31st 2004 and December 31st 2005 (16-month period), with age ranged from 9 months to 15 years old, most of them were residents of Ho Chi Minh City and a few came from surrounding provinces.

All of admitted patients diagnosed as spasticity in cerebral palsy was based on individual medical history and clinical findings. A number of patients were assessed with electromyography (EMG), electroencephalography

(EEG) and magnetic resonance imaging (MRI). The administered doses of botulinum toxin type A (Dysport[®]) for lower limb muscles were 10 to 15 Units/kg, 6 Units/kg for upper limb muscles, 3 Units/kg for forearm muscles.

Clinical examination and assessment based on the modified Ashwoorth Scale scores determined before and at 2 weeks, 1, 2, 3, 4, 5, 6, 9, 12, 14, and 16 months after injection of botulinum toxin type A (Dysport[®]); and on a qualitative evaluation of patient's relative who was the main care-giver of each patient. Side-effects were recorded with the cooperation of patient's relatives and attending physicians.

Clinical findings:

- Three categories of motor disorders were noted: spasticity, chorea, ataxia:
 - + Positive findings: hypertonicity, painful contracture
 - + Negative findings: weakness, fatigability, maladroitness.

Conclusion :

The main advantages of botulinum toxin type A (Dysport[®]) injection are its local efficacy in localized muscle spasticity and simple administration technique for use in outpatients. ,

Treatment with botulinum toxin type A (Dysport[®]) injection, used as an adjuvant measure, in children with cerebral palsy spasticity may facilitate daily activities and nursing care for pediatric patients.

Treatment cost is an issue should be considered in daily practice setting.

Title of Abstract:

Evaluation of surgical treatment of ossification of the posterior longitudinal ligament of the cervical spine at Việt Đức Hospital

Author(s): Nguyễn Vũ, MD; Hà Kim Trung, MD, PhD **Main Institution where the work was done:**

Neurosurgery Department of Việt Đức Hospital

Objective:

To evaluate surgical treatment of ossification of the posterior longitudinal ligament of the cervical spine at Việt Đức Hospital

Methods:

Prospective, cross-sectional descriptive study

Results:

Male / Female = 3/1; mean age : 55.2 ± 9.966 (39-70). Major clinical presentations are neck pain, weakness and numbness of upper limbs or 4 limbs. 25% of the patients had sphincter dysfunction. With ossification of 1 – 3 levels, the lateral anterior approach was chosen (85%). As for ossification of 4 levels or more or combined anterior and posterior compression, open-door laminoplasty was performed (15%). Average operation duration : $136.25 \text{ minutes} \pm 47.592$ (60 minutes – 210 minutes). Post operative recovery result (16 patients) with mean follow-up time $12.81 \text{ months} \pm 6.002$ (3 months – 24 months) shows : most patients' symptoms have been resolved, in particular complete recovery of sphincter function. Evaluated according to Japanese Orthopedics Association (JOA): preoperative JOA 9.88 ± 1.893 (5 – 12); postoperative JOA 15.63 ± 1.784 (10 – 17). The mean recovery rate was : $82.369\% \pm 18.0092$ (41.7% - 100%). One patient died one month after surgery, due to milk choking and pneumonia

Conclusions:

Surgical treatment of ossification of the posterior longitudinal ligament of the cervical spine delivers good recovery results; the symptoms improve over time together with close cooperation of rehabilitation.

Title of Abstract:

Initial assessment of the locator system in spinal surgery at Việt Đức Hospital

Author(s): Please underline the presenting author

Nguyễn Vũ, MD; Dương Đại Hà, MD; Hà Kim Trung, MD, PhD

Main Institution where the work was done: Neurosurgery Department at Việt Đức Hospital

Abstract Text (maximum 250 words)

Objective:

Initial assessment of the locator system in spinal surgery

Methods: Prospective descriptive

Result: 6 spinal operations with locator system application (4 cases of through - joint screws, 1 lumbar vertebra dislocation and 1 vertebral tumor T10 – T11). All were indicated to have spinal fixation with different techniques. These were difficult cases because the anatomical landmarks were changed by previous surgery, rotational deformity or bone – destructive tumor. Thanks to the locator system, it was possible to check screw positioning, sizes and directions for better alignment and correctability to avoid causing injury to important nervous and vascular structures: vertebral artery, cervical cord, nerve root, pleura. Postoperative Xrays show good results: accurate screw positioning, good screw direction, proper correction

Results: The locator system has these merits: accurate positioning, direction and sizes of screws, surgical safety, complication avoidance, non Xray exposure during surgery. However, because the constructed images which are based on patients' Xrays are virtual ones and do not precisely correspond with the true images of patients in surgical positions, it is impossible to be totally dependent on the machine.

Title of Abstract:

Spinal Cord tumor surgery at Neurosurgery Department, St Paul Hospital

Author(s): Please underline the presenting author

Nguyễn Công Tô, Nguyễn Đình Hưng, Dương Trung Kiên, Võ Minh Nguyễn

Main Institution where the work was done: Neurosurgery Department, St Paul Hospital

Objective:

- Evaluation of spinal cord tumor surgery for 5 years (2003 – 2008) at Neurosurgery Department, St Paul Hospital

Methods: Non-controlled, cross - sectional, clinical descriptive study.

Result: 51.2% patients were 20 – 50 years old. 73.1% came when there was clinical cord compression. The tumors were often in thoracic segments (58.5%) and below the dura mater – outside the spinal cord (61%). The two common tumors were nerve root and meningeal ones. Laminectomy was performed for 87.8% of the cases. Besides, hemilaminectomy and osteoplastic laminotomy were also applied. Postoperatively, only 7% were unable to walk versus 26.8% preoperatively. There were 3 postoperative complications and 1 death due to metastatic tumor.

Results: Surgery is highly efficacious for spinal cord tumor treatment. The minimally invasive procedures are applied more and more.

Title of Abstract:

A spinal cord injury case with bladder dysfunction treated with oxybutynine vesically injected

Author(s): Dr. Bùi Văn Anh

Main Institution where the work was done: SCI Department, Nusing and Rehabilitation Hospital in Đà Nẵng

Introduction Treatment of bladder dysfunction in SCI patients is a new issue with little experience. SCI patients during rehab suffer from serious problems, urinary infections and subsequent glomerular filtration deficiency and finally kidney failure. These are two leading killers among SCI patients.

Our hospital has used oral oxybutynine for bladder overactivity but with side effects. It is difficult for those with injury level higher than T6 because these lesions usually cause AD (Autonomic dysreflexia), hypertension ... and oral oxybutynine often leads to hypersympathetic effects. This is a troublesome adverse event. According to the research of Professor Theodor Senge et al about "Oxybutynine solution vesically injected for elderly patients with SCI"

25 patients, 14 cervical SCI and 11 thoracic SCI.

Pretreatment vesical pressure : 21 cases $> 40 \text{ cmH}_2\text{O}$ ($54 \pm 22 \text{ cmH}_2\text{O}$); 4 cases $< 40 \text{ cmH}_2\text{O}$ ($26 \pm 9 \text{ cmH}_2\text{O}$)

Post treatment : 21 cases $< 40 \text{ cmH}_2\text{O}$ ($26.5 \pm 21 \text{ cmH}_2\text{O}$), 4 cases $> 40 \text{ cmH}_2\text{O}$ ($69 \pm 10 \text{ cmH}_2\text{O}$)

Mean study time = 6 months

Based on the above background, I have decided to conduct this case project

Objective:

- To evaluate therapeutic response of SCI patients with high vesical pressure (due to spastic bladder) with oxybutynine vesically injected. This practice has been done elsewhere in the world.
- To enhance prevention of chronic renal failure in SCI patients with high vesical pressure (due to spastic bladder)
- To reduce undesirable side effects caused by oral anticholinergic agents (oxybutynine)

. **Methodology:** Retrospective of 1 case

Male, 34 years old

Date of admission : 10 July, 2007

Chief complaint: tetraplegia

The patient had cervical cord injury due to traffic accident on 19 June, 2007. He was taken home and later to Danang Hospital for conservative treatment. On 10 July 2007 he was transferred to Danang City Rehab and Nursing Hospital for further treatment.

Incomplete tetraplegia : elbow flexion 4 on the right; 3 on the left.

Wrist extension : 2 right and 3 left. Elbow extension : 2 bilaterally. All the lower muscles were 0. Anterior left arm sensation was intact and impaired sensation below it. Anal region sensation (+), voluntary anal contraction (+), bulbocavernous reflex (+). Spasticity level 1, tendon reflex (++) 4 limbs. Pressure sore grade 1 on left heel. Bowel and leakage bladder incontinence. AD happen sometimes.

ASIA classified : C5-B.

Voiding diary, bladder pressure checked by water column to determine the bladder muscle overactivity

Date : 29 August 2007

NaCl 0.9% administered vesically at 24 mL / minute.

1. Clinical – Laboratory findings
 - Blood urea 6mmol/L
 - Blood creatinine 76 $\mu\text{mol/L}$
 - Urine leakage 1250mL/24h
2. Vesical pressure : 69 – 71 cmH₂O
 - Vesical volume 150mL
 - A lot of leakage
3. Conclusion

Neurogenic bladder: spastic bladder

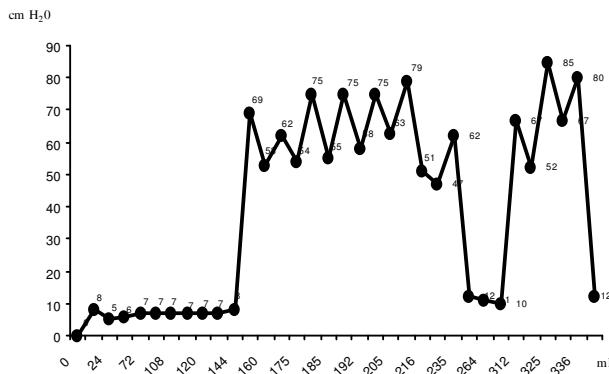


Figure 1: Vesical pressure before oxybutynine injection

He was treated with oxybutynine 500mg in NaCl 0.9% solution from 30 August 2007. Initially there was 10mg = 10mL solution/day, divided into 2 doses. After 15 days (14 September 2007), due to persistent leakage, the dose was doubled 10mg = 10mL, twice a day.

During the course of treatment, he had no side effect caused by oxybutynine 20mg/day.

On 30 October 2007, the bladder pressure was rechecked as follows:

- Water column and no drug was used
- 30 minute break
- Oxybutynine 10mg = 10mL vesically injected
- Another 30 minute break
- Bladder pressure was rechecked

Oxybutynine injected vesically caused no side effect.

Results:

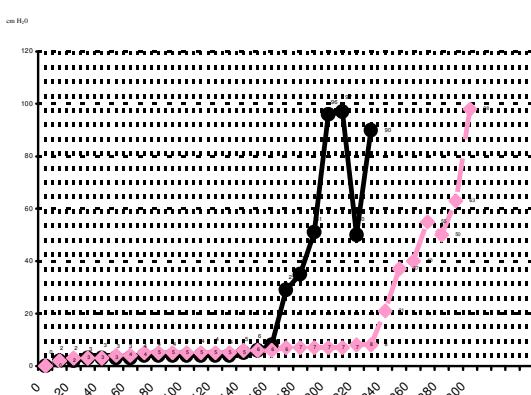


Figure 2

The solid line shows the bladder pressure already treated with oxybutynine from 30 August 2007 to 30 October 2007 and before the drug injection on the measurement date.

The dotted line describes the bladder pressure after using Oxybutynine 30 minutes.

The two curves show that the bladder storage is higher and the bladder pressure is lower after vesical oxybutynine treatment. The patient did not have any side effects.

Figures 1 and 2 are compared as follows:

Bladder storage volume	150ml	180-190ml	240ml	280ml
Bladder pressure				
No drug used	69 cm H₂O, leakage			
Oxybutinine from 30 August 2007 to 30 October 2007		35cm H₂O – 51 cm H₂O		
30 minutes after Oxybutinine 10mg/10mL NaCl 0.9% vesically injected	7 cm H₂O	7 cm H₂O	7 cmH₂O	50 cmH₂O

Conclusion

- This incomplete SCI C5B can cause AD. He has had bladder overactivity (vesical pressure at 150mL : 69 cmH₂O with a lot of leakage due to impaired bladder sphincter).
- Oxybutinine (anticholinergic agent) solution injected vesically : more storage (280mL) but lower pressure 50 cmH₂O.
- This good therapy increases bladder storage capacity, decreases renal pressure, prevents kidney failure due to urine reflux and reduces side effects of anticholinergic agents on a high SCI lesion (more than T6) with potential AD.

With high volume of patients currently, the therapy application is quite difficult because it is time – consuming and requires high workload for bladder pressure measurements with water column. Besides, oxybutinine is still too expensive for long term management.

Title of Abstract: Reflections on a visit to the SCI rehabilitation unit in HCMC, 2006 – a (European) nurse's perspective

Author(s): Please underline the presenting author:

Anna-Katarina Koch

Main Institution where the work was done:

SCI Rehabilitation Unit Ho Chi Minh City, Vietnam

Abstract Text: (maximum 250 words)

In 2006, I have had the chance to visit the SCI rehabilitation unit in HCMC, Viet Nam. By that time, I had been working as a nurse in a SCI rehabilitation unit in Herdecke, Germany for 5 years. The purpose of my visit was to observe the nurses' performance and provide feedback to the staff of Handicap International Belgium, in addition I held a lecture on spinal cord injury and sexuality for the staff of the rehabilitation unit.

With no previous work experience from developing countries, I was not sure what to expect concerning the four concepts of the universal nursing paradigm: individual, health, environment and nursing. It was not surprising then that I observed many similarities resulting in a match of nursing skills (e.g. techniques of bladder management and wound management) and the needs of a person with a spinal cord injury because these are generally the same all over the world. But on the part of the roles nurses take in their relationship with clients and their family members, I was able to observe a much less active approach in communication and psychological support. Partially that might be due to differences in the nursing environment since in Viet Nam, a great deal of personal care is performed by family members which results in a limited number of contacts of nurses with their clients compared to settings in Germany and Finland.

Title of Abstract: IMPORTANCE OF A MULTIDISCIPLINARY APPROACH TO NEUROGENIC BLADDER DYSFUNCTION IN CONGENITAL AND ACQUIRED SPINAL CORD LESION IN CHILDREN

Program Book of ASCoN Conference
Date: 9-11 Dec, 2008

Author(s): Please underline the presenting author: Giovanni Mosiello, Maria Paola Pascali, Nguyen Duy Viet, Luca Vicari, Giusi Di Serio, Lorena Turriani, , Laura Feci, Maria Letizia Salsano, Silvia Mignani, Enrico Castelli, , Mario De Gennaro .

Topic: Please underline

Comprehensive Management

Prevention

Free Paper

Type of presentation : please underline

Poster presentation

Oral communication

Both

Main Institution where the work was done: Bambino Gesù Children's Hospital Rome, Italy

Objective: Congenital or acquired spinal cord lesions result in a serious physical disability, reducing quality of life and restricting social activities. The importance of neurogenic bladder dysfunction (NBD) has been well described. We conducted this prospective study to define the role of a multidisciplinary approach to NBD

Methods: 25 children, 16 males and 9 females, aged 0.1-16.3 years with acquired spinal cord injury (SCI) and 29 children, 13 males and 16 females, aged 0.5-17.2 years, with spina bifida (SB) were evaluated. In all patients a complete neuro-urological evaluation was performed considering pad use, diaries, renal ultrasound, urodynamics. NBD were classified according to International Children Continence Society criteria. Psychological and familiar dynamics evaluation as well as clinical neurological evaluation using American Spinal Injury Association scale and SCIM were evaluated too. The neuro-urological therapeutic approach was evaluated in all patients considering: clean intermittent catheterization (CIC) or self administered CIC, pharmacotherapy, endoscopic and surgical treatment.

Results: Motor disability was related to lesion site and it is worse in acquired than congenital SCI. Quadriplegic patients and children < 3 years of age presented the lowest SCIM scores (<40). Considering psychological features Spina Bifida families showed a better adaptation to disability even their children's autonomies were reached later. Quality of life was mainly influenced by incontinence. 24 /25 acquired SCI and 28/29 SB presented NBD and Bowel dysfunction. All patients accepted intermittent clean catheterization, while only 30% performed regularly bowel regimen. 9 patients with acquired SCI and 23 with SB were treated for incontinence. The rate of therapeutic proposal acceptance was 70% and 90% respectively.

Conclusions Loss of sphincter control influenced patients and relatives quality of life more than motor disability. A multidisciplinary approach may facilitate the maximum recovery level.

Title of Abstract:

BOWEL MANAGEMENT IN YOUNG ADULTS WITH SPINAL CORD INJURY.

Author(s): Please underline the presenting author: Giovanni Mosiello, Viet Nguyen Duy, Maria Paola Pascali, , Francesca Musciagna, Paola Frillici, Lorena Turriani, Patrizia Cassarino, Angelo Argenti, Sabrina Rossi, , Giusi Di Serio, Maria Letizia Salsano, Mario De Gennaro

Urodynamics, NeuroUrology and NeuroRehabilitation Units,

Bambino Gesù Children's Hospital Rome, ITALY

Objective: Patients with spinal cord injury (SCI) commonly present with bowel and bladder dysfunction both of which can affect quality of life (QOL). Neurogenic bowel dysfunction (NBD) is commonly managed empirically with diet and mild laxatives combined with sporadic enemas or digital manouevres, and patients that are refractory to these measures are often considered as surgical candidates. This study was designed to evaluate the effectiveness of a modified enema continence catheter (ECC) for transanal irrigation on the QOL in young adults with NBD.

Methods: After institutional board approval 10 SCI patients with NBD (mean age 22.6 years) were enrolled in this trial. The level of the lesion, ambulatory status, manual dexterity, and the degree of NBD was determined in all patients. The EEC system for transanal irrigation was used for 3 weeks of treatment (Peristeen, Coloplast A/S Kokkedal Denmark). The volume of water used, the degree of balloon inflation, and the frequency of enema administration is determined during the first weeks of treatment. Initially 700ml of tepid tap water is administered once a day. NBD symptoms and QOL were evaluated in all patients before and after the treatment using a tested questionnaire. Statistical analysis was performed using the McNemar Test and Sign Test

Results: Twenty-five percent of the patients noted a reduction or eliminated the use of pharmaceuticals by the end of treatment study. 75% of the patients became less dependent on their caregiver as well. Successful outcome was recorded regarding fecal continence in 66.6%, constipation in 58.3%, and QOL improved in 75%. The time necessary for evacuation and the need of mechanical stimulation were reduced in 58.3% and 66.6% respectively.

Conclusions: ECC is a simple therapeutic method for managing NBD which results in an improved QOL, for this reason we strongly suggest to consider ECC in all patients before Malone procedure

Title of Abstract: A MINI INVASIVE TREATMENT OF VESICOURETERAL REFLUX IN CHILDREN WITH NEUROGENIC BLADDER USING COMBINED INJECTIONS OF DEXTRANOMER/HYALURONIC ACID COPOLYMER AND BOTULINUM TOXIN.

Author(s): Please underline the presenting author: Giovanni Mosiello, Maria Paola Pascali, Nguyen Duy Viet, Maria Letizia Salsano, Enrico Castelli, Mario De Gennaro

Main Institution where the work was done:

Bambino Gesù Children's Hospital, Rome , ITALY

Objective: Endoscopic injection of dextranomer/hyaluronic acid (DxHA) is a well established treatment for vesicoureteral reflux (VUR). Treatment of VUR in bladder dysfunction remains challenging. We report our results with simultaneous DxHA and botulinum toxin A (BoNTA) bladder injections for VUR in the neurogenic bladder.

Methods:

10 patients, 4 boys and 6 girls, (average age: 10.1 ± 7.4 years), with neurogenic bladder and VUR were treated, 6 spinal cord injury and 4 spina bifida. All patients were evaluated with urine culture, videourodynamic study, renal ultrasound. Inclusion criteria were VUR grades 2-5, neurogenic bladder overactivity not responding to anticholinergics and intermittent catheterization, and antibiotic prophylaxis for recurrent urinary tract infection (UTI). Exclusion criteria were significant mental disability or previous urological surgery. All patients were entered into this study after approval by the institutional review board. Treatment consisted of simultaneous endoscopic subureteral injections of DxHA for VUR and detrusor injections of BoNTA, 10 I.U./kg., maximum 300UI. All patients were evaluated with regular 6 month follow-up including videourodynamic study and renal ultrasound for an average of 20.6 months.

Results: 17 refluxing units were treated in 10 patients. Reflux resolved in 15 of 17 units. In one patient with severe bilateral VUR a reduction of the reflux from Grade 5 to 3 was noted. In all others no relapse of reflux was noted at a mean follow-up of 15.6 months. The average increase in bladder volume on follow-up urodynamic study was 79cc with a reduction in detrusor overactivity of 23 cmH₂O. In 7 patients repeated BoNTA injection was undertaken to further reduce detrusor overactivity, 1 combined with DxHA. Urinary tract infections were eliminated in all, although 2 patients are still on antibiotic prophylaxis

Conclusions This minimal approach with combined bladder injections of DxHA and BoNTA appears to be effective in children for treatment of VUR in neurogenic bladder.

Title :ROLE OF YOGIC PRACTICES IN AUTONOMIC AND HIGHER FUNCTION CONTROL IN SPINAL CORD INJURY

Author : Vijay Sharma

Back ground and Hypothesis:

“The flow of Pranic energy is obstructed in Astral body, due to an injury in Physical body.”

Treating the Partial Spinal Cord Injury with yogic practices will result in improved autonomic and psychological functioning as compared to group receiving best supportive treatment alone.

The flow of Pranic energy is obstructed in Astral body, due to an injury in Physical body. So, if we increase the pranic level in astral body through yogic practices, the injury will also heal up in physical body.

Objective: To assess the effect of yogic practices on autonomic and higher functions of brain in patients with incomplete spinal cord injury.

Study Design: Randomized control trial comparing patients that received the yogic intervention with matched controls on measures of autonomic and psychological parameters.

Method: A total of 10 intervention group participants and 8 matched controls were selected from inpatients at Department of physical medicine and rehabilitation of King George Medical University, Lucknow. Outcome measures of autonomic and psychological parameters were collected before and after 3 months following intervention by using the Hamilton rating scale for Depression, Hamilton rating scale for anxiety, International Spinal cord injury scale. A battery of six standard tests will be used to assess the integrity autonomic function status of the subjects(Edwin et al. 1992). Matsyasana, Bhujangasana, Tiryakabhujiangasana, Balasana, Makarasana, Savasana, Nadishodhana Pranayama, Bhramari Pranayama and AUM chanting are used as yogic tools for spinally injured patients.

Results: 16 to 24 agegroup and thoracolumber vertebral region is more prominent for the spinal cord injury. Fall from height and fall of heavy weight on back, is the leading cause for spinal cord injury. Males are more susceptible for the spinal cord injury comparing. Intervention group participants showed a significant reduction in depression and anxiety, compared to matched controls. There was a significant improvement showed in spinal cord injury and autonomic parameters related to injury .

Conclusions :Yogic practices develop a subtle pressure on that obstructed energetic levels ,and clear it up. As the flow of pranic energy is clear up and they flow naturally in the body without any obstruction and slowly the injury will also heal up.

Poster

Abstract

Presentations

Title :Spinal Cord Injury Rehabilitation Services in Sri Lanka

Author : P.K.A. Kithsiri, National Trainer (S.C.I rehab Sri Lanka) .

Ministry of health Sri Lanka is planning to decentralize rehab services through out the country. All patients with spinal cord injuries are admitted to the teaching hospitals for their acute and sub acute management, mainly to the National hospital, Sri Lanka. These patients needing long term rehabilitation are admitted to rehabilitation hospital Ragama, where the patients are rehabilitated by a unit multi disciplinary team. The rehabilitation hospital is situated close to Colombo and most of them need to travel a long distance from their home town for admission to the rehabilitation hospital in ragama.

Sri Lanka has provinces and 25 districts. The 2nd rehabilitation centre started in central province at Digana, which cater to about 30 S.C.I patients. Another two rehab centers will be opened in the North Central and Southern provinces by next year.

National Trainers on S.C.I rehab were trained at rehabilitation hospital Ragama by motivation (British – Charity) in 1999. Training programmed on S.C.I rehab have been conducted since 2006 for other teaching hospitals with the help of John Grooms.

Title : “A Case report on Heterotopic Ossification in Guillain-Barré Syndrome”

Authors : Ohnmar H, , Roohi A.S, Naicher AS

Introduction

Heterotopic ossification (HO) is the abnormal development of bone within soft tissue and frequently encountered after traumatic brain injury or spinal cord injury, rather than lower motor neuron disease. It is a rare complication in Guillain-Barré syndrome (GBS).

Objective: To describe a case of Guillain-Barré syndrome complicated by heterotopic ossification.

Methods: From the detailed case records and a review of the literature.

Results: We present a case of a 39 -year-old man who has been diagnosed to have GBS about 10 years previously, presenting with limitation of both active and passive range of motion in bilateral shoulder joints and bilateral hip joints. He was totally independent before but needs a quad cane for ambulation. The radiologic imaging study of bilateral shoulder joints and hip joints showed massive heterotopic ossification (Brooker's Classification- Class 4). He did not reveal any encephalopathy-related symptoms or signs, and hypercalcemia, and/or related metabolic derangement during 10-year follow-up period. Although the active rehabilitative management was initiated, the outcome is not promising because of his long-standing matured heterotopic ossification.

Discussion: Heterotopic ossification is a frequent complication in spinal cord injury or brain injury. Just a few cases following peripheral nerve disorders have been reported. Serious neurologic deficit

and encephalopathy may influence the development of heterotopic ossification in patients suffering from Guillain-Barré syndrome.

Conclusion: Although heterotopic ossification is a rare complication in Guillain-Barré Syndrome, this possibility of complication must be known by the clinicians who should have a special attention to such patients.

Title : Community skills training and self efficacy in paraplegic persons: a pilot study

Author(s): Wachiraporn Wittayanin, Kanyaluck Uttarachon, Apichana Kovindha

Institution : Department of Rehabilitation Medicine, Faculty of Medicine, Chiang Mai University, Thailand

Objective: To study the effectiveness of community skills training on self efficacy of paraplegic persons.

Methods: Paraplegics from spinal cord lesion were recruited into the study. A 3-day community skills training consisted of three steps: training wheelchair skills in a hospital ground, practicing communication skills and finally, training community skills – using public transportation and shopping at a market. Self efficacy scale (by Jerusalm and Schwarzer) and spinal cord independent measure (SCIM) were assessed pre- and post- training. At the end, all participants rated on the training programme including their satisfaction. Paired t-test was used to assess effectiveness of community skills training program on self efficacy.

Results: Twenty-two spinal cord injured paraplegics (15 males, 7 females; average age 38.0 ± 11.6 years, duration of injury: 2 months to 7 years; 5 new and 17 chronic paraplegics; 9 never went out of home with a wheelchair and 13 had experience in community) participated in the study. After three days of community skills training, self efficacy was improved significantly (from 2.55 to 2.96, $p<0.001$). According to SCIM, mobility subscales were slightly increased (from 16.00 to 16.18, $p=0.045$) while the mean score of SCIM for self care, respiration and sphincter management subscales were not changed after training. Participants rated the training programme and their satisfaction as ‘good’. Three months after the training, of 9 cases who were never been out

with a wheelchair before training, 7 met friends outside their home, 8 could transfer oneself independently from a wheelchair to a car, 3 went out shopping and 2 went to a temple to attend religious activities.

Conclusions: The results showed that community skills programme could improve self efficacy level of new paraplegics and old cases that had no social life outside the family.

Title : Wheelchair Skills Training for paraplegic persons: a pilot study.

Authors : Surachai Tangsakulwatthana, Narongrat Sawattikanon, Apichana Kovindha

Institution : Department of Rehabilitation Medicine, Faculty of Medicine, Chiang Mai University, Thailand

Objective: To study the effectiveness of a 5-day wheelchair skills training (WST) for paraplegic persons.

Methods: Fourteen paraplegic persons (average age 35.14 years, 1 new case and 13 chronic cases, and average duration of post injury 4 years) participated in the WST programme which consisted of watching a video of wheelchair skills and practicing wheelchair skills: indoor skills, community skills and advance skills. Each person's wheelchair skills were assessed pre- and post-training by using the wheelchair skills version 3.2 (by Kirby et al, 2004). Paired t – test was used to analyze the effectiveness after training.

Results: All used a sport wheelchair except one using a standard wheelchair. Improvement in wheelchair skills after completion of the WST programme was significantly increased from $68.97\% \pm 11.91$ to $90.34\% \pm 8.37$ ($p < 0.001$). There were 2 skills – ascending high curb (17.8 cm) and negotiation obstacle 13 cm high, that all participants could not achieve. The only one person who used a standard wheelchair could not perform any advance wheelchair skills - all items of wheelie.

Conclusion: The 5-day wheelchair skills training programme could prove wheelchair skills of paraplegic wheelchair users. Achievement seems to depend on types of wheelchair i.e., a sport type wheelchair is preferable.

Title : The Correlation of Functional Abilities and Emotional Status of Spinal Cord Lesion (SCL) Persons

Author(s): Attawong T, Kovindha A, Rukpongashoka B, Boorngern S, Suwichai J

Institution : Department of Rehabilitation Medicine, Faculty of Medicine, Chiang Mai University, Thailand

Objective: To study the functional abilities that correlated with anxiety and depression in disabled persons suffering from spinal cord lesion (SCL).

Methods: SCL patients admitted between August 2006 and July 2007 at Rehabilitation Ward, Maharaj Nakorn Chiang Mai Hospital were recruited into the study. Demographic data were collected. The spinal cord independence measure (SCIM) was used to assess functional abilities and the hospital anxiety and depression scale (HADS) for anxiety and depression. SCIM and HADS were analyzed to assess correlation between functional abilities with anxiety and depression.

Results: There were 135 post-acute and chronic paraplegic and tetraplegic patients in the study. Functional abilities were not correlated with anxiety but was minimally and negatively correlated with depression at the range of 0.05 statistical significance level ($r = -.193$). In addition, depression had positive correlation with anxiety at 0.01 statistical significance level ($r = .608$) in SCL persons.

Conclusions: Depression was correlated with anxiety in spinal cord lesion persons. In this study, the spinal cord lesion persons who had less functional abilities showed more depression.

EASY CYSTOMETRY USING A SIMPLE WATER-COLUMN

Géraldine Jacquemin¹ , Vo Thi Huong², Eric Weerts², Jean- Jacques Wyndaele³

1. Department of Physiatry, Montreal Rehabilitation Institute, Canada

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3. Department of Urology, University Hospital of Antwerp, Belgium

ABSTRACT

Neurogenic bladder is a common consequence of spinal cord lesions. Intra-vesical pressure is one of the main predictors of upper urinary tract health; however, urodynamic measurements are most often unavailable in poorer countries due to the prohibitive cost of equipment. In this article a simple method of measuring intravesical pressures will be described.

Using a catheter introduced in the bladder linked with a column stabilized vertically, bladder pressures can be measured directly. Though very basic, this method is reliable when carried out properly. To make truly urodynamic measurements, additional procedures can be added such as interrupted filling, measurement of pressure development during bladder tapping.

The method is described here in detail including the materials needed, a visual description of the technique and installation as well as an explanation of accurate result interpretation. This method has been widely used in several centers across the world and proved to be helpful in the detection and management of high bladder pressures. Those working in centers where no urodynamic equipment is available will benefit most from learning this simple technique.

Title : Development of guiding principles for prevention of Spinal Cord Injury by the Asian Spinal Cord Network

Author : Mr Eric Weerts , Handicap International Belgium ; Dr HS Chhabra , ASCON Executive Committee ; Ms Muldoon Maggie , ASCON secretary

Program Book of ASCoN Conference
Date: 9-11 Dec, 2008

Objective and background

Spinal Cord injuries occur to 16 to 80 persons per million inhabitants worldwide. Most causes are attributed to traffic accidents, domestic falls and labor accidents. It affects mobility, sensation and bowel and bladder control mainly. It has serious impact on the quality of life and economic independence of individuals. Health professionals providing care for SCI patients are interested in prevention strategies but knowledge is not widely available in Developing countries. The objective of this abstract is to present an update on how to develop basic guiding principles for prevention strategies to decrease SCI accidents.

Contends

The document approaches the mechanisms of the accident and relate mainly on analysis surrounding circumstances of the accident. Behavioral considerations are explained in the event chain leading to SCI accidents

An overview on resources available on injury prevention is given, ranging from international organizations that handle prevention programs to national and international policies that have been developed to reduce spinal injuries directly or indirectly.

Conclusion

The guiding principles provide an overview on how SCI prevention can be implemented with simple methodology of data collection, consultation of available local resources. Personal behavior and responsibility are key issues in the occurrence of an SCI accident in the community.

Title : IMPLEMENTATION OF SPINAL CORD INJURY UNITS AT PROVINCIAL HOSPITALS:
KHANH HOA- DA NANG- PHU YEN in VIETNAM

Author : Handicap International Vietnam

Title : Presentation of Wheelchair model “ Roughrider “

Author : Whirlwind International

Title : A Depression and Anxiety scale use in Vietnam Bach Mai Spinal Cord Department

Authors : Astrid Carnavalli , Julien Carriere

SCHEDULE FOR THE CULTURAL EVENING OF 7th ASCoN CONFERENCE

Ethnology Museum (transport will be provided)

December 10, 2008 at 19:00

19.00 – 19.05: Address by **Mrs Truong Mong Hang**

19.05 – 20.05 Buffet Dinner

19.05 – 19.20: Performance of Disabled People

19.20 – 20.05 Performance of Vietnamese Traditional music

20.05 – 21:55 : Cultural Exchange between ASCoN countries and all delegates

Vietnam	United Kingdom	USA
Thailand	Sri Lanka	Austria
Nepal	Myanmar	India
Ireland	France	Germany
Australia	Canada	Belgium
Bhutan	Bangladesh	Poland
Netherlands	Malaysia	Israel
Switzerland	China PR	

21.55 : Closure of the cultural evening

ISCoS – THE INTERNATIONAL SPINAL CORD SOCIETY

History

Program Book of ASCoN Conference
Date: 9-11 Dec, 2008

In 1961 the International Medical Society of Paraplegia was founded at Stoke Mandeville Hospital in the UK with Sir Ludwig Guttmann as the President. In 2001 the members of the Society agreed to change the name to the International Spinal Cord Society.

The Objectives of ISCoS

International Spinal Cord Society (ISCoS) shall:

Serve as an international impartial, non-political and non-profit making association whose purpose is to study all problems relating to traumatic and non-traumatic lesions of the spinal cord. This includes causes, prevention, basic and clinical research, medical and surgical management, clinical practice, education, rehabilitation and social reintegration. This society will function in close collaboration with other national and international bodies, thereby encouraging the most efficient use of available resources.

Provide a scientific exchange among its members and others by collecting and disseminating information through publications, correspondence, exhibits, regional and international seminars, symposia, conferences and otherwise

Advise, encourage, promote and when requested, assist in efforts to co-ordinate or guide research, development and evaluation activities related to spinal cord lesions throughout the world.

Advise, encourage, guide and support the efforts of those responsible for the care of patients involved and when requested, correlate these activities throughout the world.

Advise, encourage, guide and support the efforts of those responsible for the education and training of medical professionals and professionals allied to medicine and when requested, correlate these activities throughout the world.

The International Spinal Cord Society shall work in collaboration with national and international bodies, thereby encouraging the most efficient use of available resources worldwide.

Membership

Application Forms for ISCoS Membership are available at the ASCoN Organization desk.

For further information on ISCoS please see their website www.iscos.org.uk