Epidemiological characters of neurogenic heterotopic ossifications in the spinal cord injured in the Morocco

H. Bennassamou a, H. Abd., N. Mankar-Bennis, N. Hajjaj-Hassouni
Service de rhumatologie et de médecine physique et de réadaptation, CHU Ibn-Sina, hôpital El-Ayachi-Salé, 10000 Rabat, Morocco

*Corresponding author.

Introduction.– Neurogenic heterotopic ossifications occur in the spinal cord injury.

Objective.– Describe epidemiological and clinical characteristics, functional impact and therapeutic problems of neurogenic heterotopic ossifications in a group of Moroccan spinal cord injured patients.

Patients and methods.– Descriptive and retrospective study of 30 spinal cord injured patients followed for functional rehabilitation at the national center for functional rehabilitation of the CHU Ibn-Sina in Rabat Morocco from 2005 to 2010. We have identified the epidemiological data, the neurological and functional status.

Results.– Sex ratio H/F: 21/9, average age 30.6 years (14–56), 73.3% paraplegic, the etiology was traumatic in 63.3%; 20% developed NHO, the pain was central neurological disease. They are manifested by stiffness, or even a joint ankylosis. In the spinal cord injured patient, they are present in the territory below the lesion and are often bilateral (2 hips for example). They are rare in low spinal cord injury.

Discussion and conclusion.– Neurogenic heterotopic ossifications occur in the Central neurological disease. They are manifested by stiffness, or even a joint ankylosis. Their occurrence in peripheral neurogenic conditions is rather rare. They most often involve the large joints. Several factors are source of complaints, including spasticity. In the spinal cord injured patient, they are present in the territory below the lesion and are often bilateral (2 hips for example). They are rare in low spinal cord injury.

References


Version anglaise

P002–EN

Epidemiological characters of neurogenic heterotopic ossifications in the spinal cord injured in the Morocco

H. Bennassamou, H. Abd., N. Mankar-Bennis, N. Hajjaj-Hassouni
Service de rhumatologie et de médecine physique et de réadaptation, CHU Ibn-Sina, hôpital El-Ayachi-Salé, 10000 Rabat, Morocco

*Corresponding author.

Introduction.– Neurogenic heterotopic ossifications are frequent in spinal cord injury.

Objective.– Describe epidemiological and clinical characteristics, functional impact and therapeutic problems of neurogenic heterotopic ossifications in a group of Moroccan spinal cord injured patients.

Patients and methods.– Descriptive and retrospective study of 30 spinal cord injured patients followed for functional rehabilitation at the national center for functional rehabilitation of the CHU Ibn-Sina in Rabat Morocco from 2005 to 2010. We have identified the epidemiological data, the neurological and functional status.

Results.– Sex ratio H/F: 21/9, average age 30.6 years (14–56), 73.3% paraplegic, the etiology was traumatic in 63.3%; 20% developed NHO, the pain was found in 33.3%; spasticity in 66.6%, 2 locations were found 6.6% (hips and knees) and 10% (knees or hips or hands); bilateral involvement was present in 100%. The complete neurological presentation 85% (ASIA) at the beginning, 33.3% have significantly improved their neurological status to ASIA C – D. The Barthel index increased from 22.7 to 66.6; the MIF from 50.8 to 77.5.

Discussion and conclusion.– Neurogenic heterotopic ossifications are frequent in spinal cord injury.

References


P003–EN

Rehabilitation of a secondary paraplegia due to diastematomyelia: Case report

A. Zaoui a, S. Kanoun, M.M. Hmida, H. Lajili, O. Bacha, S. Friguia, K. Maaraf, N. Rejeb
Service de médecine physique, CHU Sahloud, Sousse, Tunisia

*Corresponding author.

Introduction.– Diastematomyelia is a rare spinal cord malformation involving a division of the cord in the sagittal plane giving rise to two hemi-cords leading to central nervous system disorders requiring surgical treatment and adapted rehabilitation.

Observation.– We reported the case of a 23-year-old girl with an uneventful history who complained of back pain for one month associated with urine loss, paraesthesias and gradually a total functional impotency of both lower limbs. The physical examination revealed the presence of a dorsal hyperpilosity and right dorso-lumbar scoliosis with a flank neurological examination. The cord MRI showed a diastematomyelia standard II with a centromedullaire ossified spur located at T9–T10. T9–T10 laminectomy was performed with excision of an osseous spur. The postoperative examination noted: absence of improvement of the paraesthesia with a pyramidal syndrome, a posterior cord syndrome and a neuro-bladder. During hospitalization in our unit, the patient participated in twice-daily sessions of functional rehabilitation. The outcome was marked by a recovery of walking ability with spontaneous micturition and complementary catheter insertion.

Discussion.– Diastematomyelia is a rare neurological malformation which accounts for 4% of all forms of dysraphisms, with clear female prevalence. As in our case, the diastematomyelia is usually thoracolombaire whereas the cervical localization is exceptional. Diastematomyelia can cause a major handicap. The diagnosis is confirmed by the MRI, the treatment of choice is surgery. Rehabilitation is crucial for diastematomyelia patients, but seldom described in the literature. Appropriate rehabilitation makes it possible to improve the functional status and quality of life of these generally young patients.


P004–EN

Mayer-Rokitansky-Küster-Hauser syndrome associated with spinal cord AV malformation

E. Mulic H. Avdíc a, M. Zonic Imamovic b, S. Kapidzic Durakovic b

a University Clinical Center Tuzla, Federation of Bosnia and Herzegovina, Tuzla, Bosnia and Herzegovina
b University Clinical Center Tuzla, Clinic for Physical Medicine and Rehabilitation, Tuzovac b.b., Tuzla, Bosnia and Herzegovina

Keywords: Mayer-Rokitansky-Küster-Hauser syndrome; AV malformation; Paraplegia; Physical therapy and rehabilitation

Case review.– Mayer-Rokitansky-Küster-Hauser (MRKH) syndrome, actually uroterovaginal agenesis, is a congenital non-formation of the vagina and the uterus, but with normal ovaries. Its clinical features include partial or complete absence (agenesis) of the uterus with an absent or hypoplastic vagina, normal fallopian tubes, ovaries, normal external genitalia and the typical 46, XX, female chromosone pattern. Secondary sexual characteristics are present. Associated renal, heart, hearing and/or skeletal abnormalities are common. Mayer-Rokitansky-Küster-Hauser syndrome usually remains undetected until the patient presents with primary amenorrhea despite normal female sexual development. Female, 41 years old, with MRKH syndrome presenting non-specific, suddenly caused pain in lower limbs (more in right leg) and sudden paralysis of lower limbs with walking disability. This patient presented primary amenorrhea, leading to a diagnosis of congenital absence of the upper vagina and uterus, with normal bilateral adnexa, and normal secondary sexual characteristics, normal karyotype (46, XX). The patient had no visceral malformations (the heart and kidneys, in particular, were normal, as assessed by ultrasound examinations) or hearing impairment. Skeletal abnormalities were observed with radiography and CT scan. Congenital malformation of vertebral canal and hemi vertebra Th 10, cleavage of the body of L4 vertebra, and scoliosis of lumbar part were confirmed.
MRI scan showed AV malformations at thoracic level, with ischemia of distal part of spinal cord. Urodynamics showed detrusor sphincter disnergia. Her intellectual and cognitive abilities were normal. After program of physical therapy and rehabilitation she was discharged as paraplegia trained for (self) intermittent catheterization and independently performing activities of daily living. Paraplegia is one of the most serious complications of congenital AV malformation in MRKH syndrome.

doi:10.1016/j.rehab.2011.07.672

P005–EN

Training for emergency situations with ventilator patients: Pertinence of educational movie

C. Charbonnier
Rééducation pédiatrique, centre mutualiste de rééducation et de réadaptation fonctionnelles de Kerpape, centre de Kerpape, BP 78, 56275 Ploemeur, France

Keywords: Neurological handicap; Ventilator assistance; Ventilator emergency; Education movie

Introduction.– Patients with severe neurological handicap requiring tracheotomy and long-term mechanical respiratory assistance create a care burden for rehabilitation units and nursing institutions. Continuous direct (visual) or indirect (audible alarm) human monitoring is necessary to guarantee their respiratory safety. This situation generates important mental effects for caregivers and family, especially if the respiratory assistance is permanent (Douglas SL 200). Case report.– To improve safety of care and monitoring, the greatest possible number of professionals in contact with these patients daily should be able to provide assistance in the event of an acute situation of respiratory distress. Broadening the number of qualified people is all the more important in light of progress made in medical rehabilitation; certain people on respiratory assistance are able to move about autonomously using an electric wheel chair in their close environment, in establishment or in their residence (Gonzales J 2004). To be as effective as possible, emergency situation training should be carried out using practical simulations of respiratory distress. Indeed, competences of self-control and of procedural memory are necessary to guarantee effective assistance in the event of a real urgency. A film simulating the principal situations likely to occur in everyday life or during the duration of care is a relevant teaching support.

Conclusion.– The object of this communication is to present a one 7-minute film prepared by the paediatric rehabilitation unit of the Kerpape center which has 15 years experience caring for children and teenagers with tracheotomy on respiratory assistance.