

doses of oral baclofen. They have been evaluated at baseline, 3 and 12 months post-ITB pump implant. Before the implant, all the shapers have been underwent to a screening test with bolus or infusion of intrathecal baclofen. A positive response, defined as a mean drop of at least 1 point on the Ashworth Scale, was a prerequisite to implantation of the ITB pump. **Results.** Of 26 patients recruited, 9 failed screening test and 4 did not complete the follow-up: 2 have been lost and 2 are dead by causes not related to drug or device. In current time, 10 patients have completed the follow-up at 12 months. Ashworth mean score decreased significantly only for the lower limbs from $3,3 \pm 0,6$ before treatment to $2,3 \pm 1,1$ at follow-up visit ($p < 0,05$). The adverse events reported have been: pocket seroma (6 cases), catheter dislodgement (1 case), bradycardia (2 cases), nausea (1 case), cutaneous erosion along the stitches of anchorage of catheter to the lumbo-dorsal fascia (2 cases), transitory urinary retention (2 cases), apoplectic fit (1 case). **Conclusion.** This study suggests that ITB therapy is a effective and well tolerate treatment for spastic hypertonia by acquired brain injury. There have been no serious adverse events.

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Poland syndrome. Use of kinesiotope in improving back pain and numbness of the upper limb

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Introduction. Poland syndrome is a congenital anomaly, noted for the underdevelopment or absence of the chest (pectoralis,) muscles on one side of the body as well as webbing of the fingers (cutaneous syndactyly) on the hand of ipsilateral side of the body. The severity of Poland syndrome is variable, and it is possible for mild cases not to be evident until puberty. It is felt, therefore, that cases may be misdiagnosed. **Materials and methods.** A male patient, 48, referred for EMG study, suffering from persisting back pain and numbness of the Lt upper limb. The EMG study didn't reveal any findings compatible with neurogenic lesion in roots of the cervical spinal. Clinical examination showed elevation of the Lt scapula, consisted spasm of the Lt trapezius, absence of the major part of the Lt pectoralis and ipsilateral cutaneous syndactyly. The whole appearance was compatible with Poland Syndrome. Our intervention focused on providing the patient with a painless period during which he would strengthen his muscles and correct his muscle imbalance. Physical means alone had no effect. Acupuncture was not tolerated by the patient. A kinesiotope program was applied aiming at correcting his posture and providing cutaneous stimulation to enforce the action of the remaining muscle groups. Kinesiotope technique is based on cutaneous stimulation over the hyper-acting muscle groups. Taping gives proprioceptive stimulation that motivates the nervous system causing auto-correction of posture and reducing pain. **Results.** The patient's symptoms were improved after a few sessions and he was able to start a program of muscle strengthening. Improvement of quality of sleep was the first sign followed by elongation of the painless periods and reduction of numbness. **Conclusion.** Providing a patient suffering from Poland syndrome, with a painless frame period, encourages systematic muscle strengthening leading to pain relief.

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Hallervorden-spatz disease. Improvement in quality of life after injection with botulinum toxin type A. And physiotherapy

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Introduction. Hallervorden-Spatz disease, is a rare neurological disorder due to abnormal iron metabolism in the brain. Iron is deposited in the globus pallidus and the pars reticulata of the substantia nigra. It is characterized by dystonia, rigidity, and choreoathetosis, progressive intellectual impairment, retinitis pigmentosa and optic atrophy. The onset is during the first two decades of life. The course of the disease usually proceeds over 10-12 years. **Materials and methods.** We report the case of a 43-year-old man whose illness spanned 15 years. Patient had a very severe spasticity in hip adductors and Lt gastroc, vision problems and mild cognitive disorders. The patient was unable to walk and deal with his daily activities. A previous effort for rehabilitation failed due to lack of collaboration. A botuline A injection was decided, even he had low life expectancy and cognitive ability. WHOQOL-BREF questionnaire has been used to

investigate the changes in the life of the patient and his sister, before and after the use of botulin toxin. This questionnaire has 26 questions about the quality of life, the physical and psychological problems, the sleep, the recreation capacity, the social interactions and the daily living activities. **Results.** The patient's quality of life was improved by 60% and his sister's by 37%. Physical and psychological problems improved by 50% and 25%. Activity improved by 75% and 50%, the recreation capacity improved by 38% and 72%, social interactions improved by 50% and 25%, daily living activities by 50% and 87% and the sleep both of them improved by 75%. **Conclusion.** Rehabilitation is meaningful even in the most affected cases. Short life expectancy and low intelligent quotient should not be an inhibition for rehabilitation. The supporting group has a domain role to play in the rehabilitation and has the highest percentage of the benefit.

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Quality of life in patients with rheumatoid arthritis

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Introduction. EuroQoL is a Quality of Life Scale that is validated and well used in patients with rheumatoid arthritis. This scale is based on five questions concerning mobility, self-care, usual activity, pain/discomfort and anxiety/depression. Each question is answered with 3 grades. (grade 1) I have no problems, (grade 2) I have some problems and (grade 3) I am unable. **Materials and methods.** The questionnaire was distributed to 20 patients with rheumatoid arthritis who were referred to our outpatient rehabilitation clinic. **Results.** The mean age of the patients was 55.22 years, and mean duration of suffering from rheumatoid arthritis was 30.25 years. Women were 92.8% of the subject. From 5 items most disabling was mobility with mean grade 1.85, followed by Self-Care (1.65), Pain/discomfort (1.6), usual activities (1.55) and finally anxiety/depression (1.35). **Conclusion.** EuroQoL is a Quality of Life Scale simple and reliable and can be used in rheumatoid arthritis to help rehabilitation staff understand better the needs of such patients.

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How does cognitive fatigue modify cognitive performance in multiple sclerosis (MS) patients?

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Introduction. Cognitive fatigue can be measured as an inability to maintain initial levels of attentional performance.(1) Researchers didn't agree whether a longer and continuous effortful cognitive task increases mental fatigue and changes neuropsychological performance.(2,3). The objectives of this study were: to examine the cognitive performances and ratings of subjective cognitive fatigue using cognitive fatiguing tasks lasting different times and to evaluate the correlation between subject cognitive fatigue and the objective performances. **Materials and methods.** Of 110 individuals with MS, only 45 patients presented significant fatigue (measured with vigilance test of Test for Attentional Performance)and initial cognitive deficit (Symbol Digit Modalities Test) and were randomized in three groups, matched for different initial levels of cognitive deficit. Each group completed a neuropsychological training in a single session lasting different times(15, 30, 45 minutes). Subjective measure of fatigue(cognitive Modified Fatigue Impact Scale(MFIS)subscales) and attentional test(Paced Auditory Serial Addition Task(PASAT)) were rated before and after the session. **Results.** There were no significant differences between the three groups on PASAT. Although cognitive MFIS subscale didn't significantly differ for the three groups, the value is close to significance. There was no significant correlation between change in subjective fatigue and cognitive performance. **Conclusion.** Changes in performance over time showed improvement rather than deterioration. These results confirm that patients' subjective ratings of their fatigue are not valid indicators of their actual performance on cognitive tests and that the cognitive fatigue doesn't decline more rapidly over the time engaged in mental activity.

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