

necessary in 52% of cases. Requests for education and information were the most frequent (36% of cases), followed by home equipment (17%), care organization (16%) and support for patients or caregivers (14%). In 67% of cases, rehabilitation objectives were met. For the 33% with an unsuccessful outcome, there was a weak participation level of patients or caregivers.

Conclusion.— The team enables appropriate care in complex situations of major disability where the already deficient social context requires a multidisciplinary approach.

<http://dx.doi.org/10.1016/j.rehab.2012.07.065>

P093-e

Rehabilitation of a hemiplegic patient with cardiac assistive device

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Introduction.— Admission of a hemiplegic patient in a PRM department with cardiac assistive device could be worrying. We report here such a case.

Case report.— A 30 years old patient underwent an ischemic stroke occurring in the course of a heart failure secondary to an extended cardiac ischemia. After angioplasty and “stent implantation”, he benefited from implantation of a left ventricular assistive device (Heart Mate II) on 8th November 2011. Treatment includes “anti-agregant” and anti-vitamin K.

He was admitted in our PRM department on 18th January 2012, with a left hemiplegia, a severe upper limb impairment, left sided sensitivity impairment, tracheotomy, possible oral feeding, no visuospatial neglect. Functional Independent Measure was 57/126. Ventricular assistance needs continuous electric energy. The whole team, physiatrists, nurses, therapists, has been trained in the device use, the way to switch from the mains to battery for daily living and rehabilitation.

Despite the initial emotional charge of this kind of “nursing” and the medical complexity, physical rehabilitation and occupational therapy could be normally conducted. The outcome will be determinant for the decision of a heart transplant. To date, no serious event is to be deplored.

Conclusion.— This abstract is written six months after the stroke. The communication expected one year after the stroke would be able to develop the outcome and the transplant decision. This case report illustrates the place of PRM teams, being the only one specialized teams able to take up such challenge after intensive care unit, with specific situations including vital and rehabilitation objectives.

<http://dx.doi.org/10.1016/j.rehab.2012.07.066>

P094-e

Prevalence and associated factors with complex regional pain syndrome type 1 of hemiplegic upper limb

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Keywords: Complex regional pain syndrome; Spasticity; Hemiplegic

Introduction.— The complex regional pain syndrome (CRPS) type 1 of hemiplegic upper limb is very common and may result in delay in the recovery of a functional motor command. CRPS is a daily concern in Physical and Rehabilitation Medicine.

Aim of the study.— Study of the prevalence of CRPS and CRPS associated factors in a Department of Rehabilitation for Neurological Impairments.

Methods.— This is a descriptive study during one day. Patients hospitalized with a first supratentorial unilateral lesion responsible for hemiplegia were included. We investigated the presence of CRPS type 1 following Budapest criteria and

we have found commonly associated parameters: the socio-demographic factors, the presence of gleno-humeral anterior and inferior subluxation, spasticity of the hemiplegic upper limb according Ashworth scale and anxiety disorders and depression according to HAD scale.

Results.— Seventeen patients (10 men and 7 women) were included. Fifty-nine per cent had a CRPS type 1: six patients in the acute phase, two in a cold phase and two in an atrophic phase. Eighty percent had a gleno-humeral anterior inferior subluxation, the average Ashworth score was 2.7, 40% had a depressive syndrome and 20% for anxiety disorders. These three parameters were significantly more frequent and larger in hemiplegic patients with CRPS type 1 than hemiplegic patient without CRPS ($P < 0.02$, $P < 0.04$ and $P < 0.01$). We did not find any significant difference with the other parameters studied including age, sex, side of the lesion and the presence of hemineglect.

Conclusions.— CRPS type 1 is a common complication in hemiplegic patients. It is often associated with gleno-humeral anterior inferior subluxation should be better by preventing a suitable positioning from the very early phase. Spasticity is a parameter that can aggravate the painful symptoms. The elements of anxiety and depression are particularly common in this population hemiplegic and painful and must receive appropriate care.

<http://dx.doi.org/10.1016/j.rehab.2012.07.067>

P095-e

Contribution of isokinetic strength training on the no-paretic side to postural control and gait in post-stroke hemiparesis

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Keywords: Hemiplegia; Isokinetic; Training; Gait; Posture

Introduction.— Postural instability and gait disturbance in hemiplegic patients after stroke are very common deficiency which could be responsible for serious falls in terms of morbidity, functional impairment and even mortality.

The aim of our study is to investigate the effect of isokinetic strength training of flexor and extensor muscles of the knee on the healthy side in posture and gait in patients with hemiplegia post stroke.

Patients and methods.— In this study, we include 20 adults with post-stroke hemiparesis (> 6 months). The twenty patients received isokinetic training on the non-paretic knee side by the Cybex Norm II machine at speeds of 90, 120, 150, and 180°/s as part of their program, thrice a week during seven weeks. Our patients were evaluated before, at the end of the training program and then after 1 and 3 months. The evaluation included an assessment of the posture by stabilometric platform (lengths X and Y are measured), gait by the locomètre of Bessou and muscular force of the knee by isokinetic dynamometer at speeds 90, 120 and 180°/s.

Results.— We noted after isokinetic strength training program significantly improved muscular strength of the quadriceps and hamstrings of healthy side, and postural control parameters. The length X has increased from 498.13 ± 82.72 mm at the beginning to 251.77 ± 25.61 mm after 3 months ($P = 0.02$). The length Y has increased from 638.17 ± 108.32 mm at the beginning to 268.97 ± 32.24 mm ($P = 0.002$).

The average of gait velocity was increased from 0.87 ± 0.03 m/s at the initial assessment to 1.15 ± 0.03 m/s after 3 months ($P < 0.001$).

Conclusion.— The results are encouraging and give support for use concentric isokinetic training of no paretic side of hemiparetic patients post stroke in association with conventional therapy.

<http://dx.doi.org/10.1016/j.rehab.2012.07.068>