Cerebral malaria: Assessment and rehabilitation: A case report

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Keywords: Cerebral malaria; Cognitive deficits; Rehabilitation

Introduction.— Cerebral malaria is the most serious complication of paludism. The pathogenic mechanisms are however still unclear, the brain may have irreversible injury.

Objective.— Describe deficits after cerebral malaria and their rehabilitation.

Method.— Case report and systematic review.

Case.— Our patient is 61 years old, with hypertonense, residing in France. She developed fever after an 11-day stay in Africa. Rapidly, her neurological status declined to Glasgow 4. Blood smears showed 40% P. falciparum parasitemia. No other cause for encephalopathy was found except cerebral malaria. The patient arrived in the rehabilitation unit after the anti-malaria treatment and two month in the recovery unit. MRI showed hypersignals from the white matter of the brain in the occiput, putamen, and corpus callosum, suggestive of cerebral vasculitis without hemorrhage.

Results.— There was no focus deficit. The dysexecutive syndrome was the predominant impairment with grasping, difficulty in inhibition and planning. Oral understanding and speech were good. Memory was normal, with much progress and learning every day. She seemed to have visual disorders and at admission in the unit experienced voiding dysfunction.

Conclusion.— Cerebral malaria is a relatively unknown pathology; rehabilitation after this disease is particularly important.

Further reading


Functional outcome after rehabilitation of the burned hand: 18 cases

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Keywords: Hand burn; DASH; Rehabilitation; Thermal burn; Electrical burn

Introduction.— Burns are very common and often occur in the context of a home accident or a workplace accident. Burns of the hand, whether isolated or associated with other areas, constitute a functionally severe condition. Care from the acute phase is particularly important to avoid or limit sequelae through early rehabilitation, enabling function as optimal as possible. This is a retrospective and descriptive study involving 18 patients treated in our rehabilitation unit for hand burns.

Results.— The average age of patients was: 35.6 years (62–13). The sex ratio showed a male predominance: M/F = 3.5. Burn severity was: 2° superficial burn (n = 10 patients), 2° deep burns (n = 6) and 3° burns (n = 2 patients). The mechanisms were: electrical burn (n = 1 patient) and thermal burn (n = 17 patients). Twelve patients underwent controlled healing and 6 patients received an autograft. The mean DASH improved after rehabilitation from 71.56 (88.3%–53.3%) early in rehabilitation to 19.27 (40.8%–3.3%) at discharge.

Discussion and conclusion.— The management of the burned hand has as its main objective: the restoration of maximum functional integrity and the cosmetic appearance of the hand. Rehabilitation management should be started as soon as the acute phase has been controlled with an optimized healing process. Close collaboration between surgeons and therapists is the key to success.

Further reading


Functional prognosis of the burned hand in an infant: A case report

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Introduction.— Burns are very common and often occur in the context of a home accident or a workplace accident. Burns of the hand, whether isolated or associated with other areas, constitute a functionally severe condition. Care from the acute phase is particularly important to avoid or limit sequelae through early rehabilitation, enabling function as optimal as possible.

Objective.— We report a case of hand burns involving both hands of an infant illustrating the main strategies for rehabilitation of the burned hand.

Tools.— A right handed nursing aged 18 months was a victim of thermal 2° degree deep burns which occurred during a home accident. The burns involved the dorsal aspect of both hands and the first commissure. The physical examination revealed a hypertrophic scar bilaterally, a positive dynamic bleeding test, and an altered vitreous tension (recoloring time between 1 and 2 s), subcutaneous adhesions, retraction of the 1st commissure and stiffness of the MCP and the thumb with defective of opposition and closure of both hands. The DASH was 60%. After the 4-month rehabilitation program, the DASH was 17.5%.

Conclusion.— The main objective of supportive care for the burned hand is to restore maximum functional and cosmetic integrity. It must be started early in the acute and optimized phase throughout the healing process and requires close collaboration between surgeon and physiotherapists. Functional prognosis of the burned hand depends on the depth of the burn and the period of supportive care.
Further reading

P088–EN
Torticollis revealing a cervical pseudomeningocele, case report
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Introduction.– Pseudomeningoceles are mostly localized in the lumbar region following a laminectomy. We report the case of a voluminous pseudomeningocele occurring a few months after a cervical laminectomy.

Case report.– A 53 year old patient has been hospitalised for rehabilitation of a tetraparesis following the second surgical resection of a recurrent cervical meningioma. Five months later the patient complained of cervical pain with laterocollis. The MRI showed a voluminous pseudomeningocele and the already known residual tumor. An antalgic medication treated efficiently the cervical pain. In absence of complication, no surgery was indicated. A close follow up with repetition of cervical MRI was decided.

Discussion.– Pseudomeningoceles may be asymptomatic or revealed by local pain, recurrence of radicular pain, intracranial hypotension or meningeal symptoms (posture-related headaches, nausea or vomiting, photophobia), tinnitus, palpable mass. MRI is the diagnostic study of choice. Complications may rarely occur: nerve root or spinal cord herniations, progressive delayed myelopathy, meningitis. Different treatments are possible, depending on the mass characteristics, symptoms and complications: close observation, conservative therapy with prolonged bed rest in Trendelenburg position, placement of an epidural blood patch, lumbar subarachnoid drainage, or surgical closing of dural tear [1–4].

References

P089–EN
Assessing disability and functional outcome after stroke: 60 cases
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Keywords: Stroke; Disability; Prognosis

Objectives.– To evaluate disability after vascular hemiplegia and identify clinical factors influencing the functional outcome after stroke, in hemiplegic patients followed in the department of Physical Medicine and Rehabilitation University Hospital of Casablanca.

Patients and methods.– Prospective study from December 2008 to December 2010 included 60 stroke hemiplegic patients followed in the service of Physical Medicine and Rehabilitation at the University Hospital of Casablanca IBN ROCHD. The functional impact of stroke was evaluated by: Barthel Index, modified Functional ambulation classification, score Enjalbert and Mini-Mental State Examination

Results.– Sixty patients were evaluated, the average age of patients was 57.3 years with female predominance, the ischemic stroke accounted for two thirds of cases. At admission, only 5.1% of patients had a Barthel Index greater than 60/100. After a year of evolution, 64.3% of patients had a Barthel Index greater than 60/100. The factors that significantly influence functional recovery were age, character haemorrhagic stroke and initial score of Barthel Index.

Discussion.– Our population of stroke patients had a relatively young age, contrary to what was reported in most literature reviews on the subject. However, the parameters associated with better functional recovery are comparable to most of the data in the literature.

P090–EN
Economic impact of musculoskeletal disorders among hospital staff
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Keywords: Musculoskeletal disorders; Work; Costs; Quality of life; Functional impairment

Objectives.– To study the incidence and the economic, functional and quality of life impact of musculoskeletal disorders (MSDs) among hospital staff.

Patients and methods.– Cross-sectional study (January 2010 - June 2010) involving a cohort of hospital staff of the University Hospital of the city of Monastir (Tunisia). Administered questionnaire including epidemiologic, clinical, functional, costs, quality of life and working conditions.

Results.– Of the 1527 staff of the University Hospital about 433 participated in this study. The average age was 33.6 years ± 9.6 years and the sex ratio = 0.78. The participants were 173 doctors, 215 staff members belonging to allied professions and 51 hospital workers. The incidence of MSDs in this population was 65.3% (283/433). MSDs were dominated by low back pain (74%), neck (38.1%) and knee pain (23.3%). Eighty-five patients (30%) had a work leave of at least one day. The average direct cost for MST was 248.163 ± 266.831 DT (137.868 € ± 148.239) with a total annual direct cost of 70230.300 DT (38691,110 €). The indirect cost average was 117.244 ± 328.832 DT (56.135 € ± 182.684) with a total indirect annual cost of 33180.26 DT (18433,477 €). The overall average cost was 365.408 ± 455.590 DT (203 € ± 253.1) with a total annual cost of 103,410.56 DT (57,450.31 €).

Discussion.– In our population, the direct cost was higher than the indirect cost, contrary to data in the literature. This can be explained by the cost of one day of work leave which is much more costly in Western countries. Furthermore, the functional impact of MSDs in our population is comparable or superior to that reported in the literature. MSDs are multifactorial diseases with considerable impact on socioeconomic, functional impairment and quality of life issues in all work areas including hospital staff.

P091–EN
Preliminary study on a therapeutic program for stroke patients
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Keywords: Stroke; Program of therapeutic education