CONTINUING MEDICAL EDUCATION SELF-ASSESSMENT

G. FERRIERO [1], R. FRISCHKNECHT [2], S. MOSLAVAC [3], T. PATERNOSTRO-SLUGA [4]

EUR J PHYS REHABIL MED 2012;48:531-3

Questions Vol. 48, No. 3 – September 2012

Rehabilitation interventions in patients with acute demyelinating inflammatory polyneuropathy: a systematic review

F. KHAN, B. AMATYA

Acute inflammatory demyelinating polyneuropathy (Guillain-Barré syndrome, GBS) can be a significant cause of new long-term disability, which is thought to be amenable to rehabilitation. Rehabilitation is an expensive resource and the evidence to support its justification is urgently needed. This systematic review presents an evidence-based overview of the effectiveness of various rehabilitation interventions in adults with GBS and the outcomes that are affected. Medline, EMBASE, CINAHL, AMED, PEDro, LILACS and the Cochrane Library were searched up to March 2012 for studies reporting outcomes of GBS patients following rehabilitation interventions that addressed functional restoration and participation. Two reviewers applied the inclusion criteria to select potential studies and independently extracted data and assessed the methodological quality. Included studies were critically appraised using GRADE methodological quality approach. Formal levels of evidence of each intervention were assigned using a standard format defined by National Health and Medical Research Council. Fourteen papers (one systematic review, one randomized controlled trial, one case-control study, five cohort studies and six case series/reports) that described a range of rehabilitation interventions for persons with GBS were evaluated for the "best" evidence to date. One high quality randomised controlled trial demonstrated effectiveness of higher intensity multidisciplinary ambulatory rehabilitation in reducing disability in persons with GBS in the later stages of recovery, compared with lesser intensity rehabilitation intervention for up to 12 months. Four observational studies, further demonstrated some support for improved disability and quality of life following inpatient multidisciplinary rehabilitation up to 12 months. Evidence for uni-disciplinary rehabilitation interventions is limited, with 'satisfactory' evidence for physical therapy in reducing fatigue, improving function and quality of life in persons with GBS. This review provides "good" evidence to support multidisciplinary rehabilitative intervention in adults with GBS; and satisfactory" evidence for physical therapy in these patients. Evidence for other uni-disciplinary interventions is limited or inconclusive. The gaps in existing research should not be interpreted as ineffectiveness of rehabilitation intervention in GBS. Further research is needed with appropriate study designs, outcome measurement, type of modalities and cost-effectiveness of these interventions.

Eur J Phys Rehabil Med 2012;48(3):507-22

1. In Guillain-Barré syndrome, autonomic dysfunction:

A. is a minor complication
B. is associated with sudden death
C. occurs only in the elderly
D. occurs in 10% of patients
E. is associated with autoimmune endocarditis

*Authors' names in alphabetic order
[1]Unit of Occupational Rehabilitation and Ergonomics Salvatore Maugeri Foundation, Clinica del Lavoro e della Riabilitazione, IRCCS, Scientific Institute of Veruno, Veruno, Novara, Italy
[2]Service de Neuropsychologie et de Neuroréhabilitation CHUV, Lausanne, Switzerland
[3]Spinal Unit Special Medical Rehabilitation Hospital, Varazdinske Toplice, Croatia
[4]Department of Physical Medicine and Rehabilitation, Medical University of Vienna, Vienna, Austria

2. What proportion of patients with Guillain-Barré syndrome present respiratory dysfunction?
A. 5%
B. 10%
C. 33%
D. 50%
E. 75%

3. Clinical guidelines for Guillain-Barré syndrome do not recommend:
A. comprehensive, flexible coordinated multidisciplinary care
B. appropriate follow-up
C. uni-disciplinary interventions
D. education and support for patients
E. education and support for carers

Rehabilitation of brachial plexus injuries in adults and children

N. SMANIA, G. BERTO, E. LA MARCHINA, C. MELOTTI, A. MIDIRI, L. RONCARI
A. ZENORINI, P. IANES, A. PICELLI, A. WALDNER, S. FACCIOLI, M. GANDOLFI

Management of brachial plexus injury sequelae is a challenging issue in Neurorehabilitation. In the last decades great strides have been made in the areas of early diagnosis and surgical techniques. Conversely, rehabilitation of brachial plexus injury is a relatively unexplored field. Some critical aspects regarding brachial plexus injury rehabilitation have to be acknowledged. First, brachial plexus injury may result in severe and chronic impairments in both adults and children, thus requiring an early and long-lasting treatment. Second, nerve damage causes a multifaceted clinical picture consisting of sensorimotor disturbances (pain, muscle atrophy, muscle weakness, secondary deformities) as well as re-organization of the central nervous system that may be associated with upper limb underuse, even in case of peripheral injured nerves repair. Finally, psychological problems and a lack of cooperation by the patient may limit rehabilitation effects and increase disability. In the present paper the literature concerning brachial plexus injury deficits and rehabilitation in both adults and children was reviewed and discussed. Although further research in this field is recommended, current evidence supports the potential role of rehabilitation in reducing both early and long-lasting disability. Furthermore, the complexity of the functional impairment necessitates an interdisciplinary approach incorporating various health professionals in order to optimizing outcomes.

Eur J Phys Rehabil Med 2012;48(3):483-506

4. What procedure is the gold standard to identify site of lesion and amount of damage in adults with brachial plexus injury?
A. Electromyography
B. Sensory and motor evoked potentials
C. Computed tomography-myelography
D. Diagnostic ultrasound
E. Magnetic Resonance Imagery

5. Which sign is mandatory to classify a Narakas type IV injury?
A. Complete palsy of the arm
B. Drop wrist
C. Complete palsy of the biceps brachialis
D. Complete palsy of the external shoulder rotator muscles
E. Horner syndrome

6. Pain in brachial plexus injury:
A. is a major complaint in adults with a brachial plexus avulsion
B. is usually long-lasting nociceptive pain due to joint injury
C. is less frequent in patients with complete palsy
D. is a minor complaint in adults with a brachial plexus avulsion
E. arises late after the trauma

See answers on page 539.