Публикации по показател В.

1.Tzvetanov P, **Rousseff RT**. Predictive value of median-SSEP in early phase of stroke: a comparison in supratentorial infarction and hemorrhage. Clin Neurol Neurosurg. 2005 Oct;107(6):475-81. *ISSN: 0303-8467,* Web of Science, 60/2 = 30 точки, **ИФ 2005 1.01**

Abstract:

Objective: To compare the prognostic value of median somatosensory evoked potentials (M-SSEP) changes in the early phase of supratentorial infarction and hemorrhage.

Material and methods: This study includes 130 patients (mean age 62+/-11.4 years, 43 women, large middle cerebral artery territory infarction in 36 patients, restricted/lacunar in 55, massive supratentorial hemorrhage in 10, small/medium size hemorrhage in 31). M-SSEP were recorded early (0-7 days in ischemia, 0-21 days in hemorrhage) and patients stratified into groups with absent, abnormal, normal response. Clinical state was determined by the Medical Research Council (MRC) scale, Barthel Index and Rankin score and followed for at least 6 months.

Results: Moderate prognostic correlation was established between N20-P25 amplitudes (r=0.34, p<0.05) and N20-P25 amplitude ratio (r=0.45, p<0.01) and Barthel Index at 6 months in patients with ischemic stroke. Moderate relationship (r=-0.34, p<0.05) exists also between N20-P25 ratio and Rankin score at 6 months in patients with small/medium size hemorrhage. In large infarctions and small/medium size cerebral hemorrhages correlations with all clinical indices of outcome are weak. In massive hemorrhage, only a weak correlation (r=-0.19, p<0.05) between amplitude ratio and Rankin score was found. The combination of initial MRC and N20-P25 amplitude ratio has 10% (in hemorrhage) to 15% (in infarction) greater prognostic value (p<0.05) than initial alone.

Conclusions: M-SSEP have independent predictive value regarding functional recovery in ischemic stroke and small/medium size cerebral hemorrhage. Combined assessment of initial MRC and M-SSEP substantially improves prognosis in acute stroke.

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Clinical Neurology and Neurosurgery 107 (2005) 475–481

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Predictive value of median-SSEP in early phase of stroke: a comparison in supratentorial infarction and hemorrhage

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Received 3 August 2004; received in revised form 5 December 2004; accepted 14 December 2004

Abstract

Objective: To compare the prognostic value of median somatosensory evoked potentials (M-SSEP) changes in the early phase of supratentorial infarction and hemorrhage.
Material and methods: This study includes 130 patients (mean age 62 ± 11.4 years, 43 women, large middle cerebral artery territory infarction in 36 patients, restricted/lacunar in 55, massive supratentorial hemorrhage in 10, small/medium size hemorrhage in 31). M-SSEP were recorded early (0–7 days in ischemia, 0–21 days in hemorrhage) and patients stratified into groups with absent, abnormal, normal response. Clinical state was determined by the Medical Research Council (MRC) scale, Barthel Index and Rankin score and followed for at least 6 months.
Results: Moderate prognostic correlation was established between N20–P25 amplitudes ($r = 0.34$, $p < 0.05$) and N20–P25 amplitude ratio ($r = 0.45$, $p < 0.01$) and Barthel Index at 6 months in patients with ischemic stroke. Moderate relationship ($r = -0.34$, $p < 0.05$) exists also between N20–P25 ratio and Rankin score at 6 months in patients with small/medium size hemorrhage. In large infarctions and small/medium size cerebral hemorrhages correlations with all clinical indices of outcome are weak. In massive hemorrhage, only a weak correlation ($r = -0.19$, $p < 0.05$) between amplitude ratio and Rankin score was found. The combination of initial MRC and N20–P25 amplitude ratio has 10% (in hemorrhage) to 15% (in infarction) greater prognostic value ($p < 0.05$) than initial alone.
Conclusions: M-SSEP have independent predictive value regarding functional recovery in ischemic stroke and small/medium size cerebral hemorrhage. Combined assessment of initial MRC and M-SSEP substantially improves prognosis in acute stroke.

Keywords: Functional recovery; Stroke; Cerebral hemorrhage; Somatosensory evoked potentials

2.Tzvetanov P, **Rousseff RT**, Atanassova P. Prognostic value of median and tibial somatosensory evoked potentials in acute stroke. Neurosci Lett. 2005 May 20-27;380(1-2):99-104. Web of Science, 60/3 = 20 точки, **ИФ 2005 1.89**

Abstract
The predictive values of early somatosensory evoked potentials (SSEPs) for the functional outcome after stroke are investigated. Ninety-four stroke patients (mean age: 61.2, S.D.: 11.8) with CT confirmed diagnoses of middle cerebral artery (MCA) infarction in 71 and supratentorial intracerebral hemorrhage in 23. Median and tibial SSEPs were recorded within 3 days of onset. SSEP parameters were compared to motor (MRC) and functional ability (Barthel index) followed up at 1, 3, 6 and 12 months. Upper limb MRC remains the strongest single predictor of functional outcome, determining 54.3% of Barthel index value at 12 months. The highest predictive value among SSEP parameters has N20-P25 amplitude ratio-34.5%. Combined application of upper limb MRC and N20-P25 amplitude ratio provided significantly stronger prognostic information-66%. Combined assessment of SSEP parameters and muscle power in acute stroke considerably improves prediction of functional outcome.

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Prognostic value of median and tibial somatosensory evoked potentials in acute stroke

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Received 30 September 2004; received in revised form 27 December 2004; accepted 9 January 2005

Abstract

The predictive values of early somatosensory evoked potentials (SSEPs) for the functional outcome after stroke are investigated. Ninety-four stroke patients (mean age: 61.2, S.D.: 11.8) with CT confirmed diagnoses of middle cerebral artery (MCA) infarction in 71 and supratentorial intracerebral hemorrhage in 23. Median and tibial SSEPs were recorded within 3 days of onset. SSEP parameters were compared to motor (MRC) and functional ability (Barthel index) followed up at 1, 3, 6 and 12 months. Upper limb MRC remains the strongest single predictor of functional outcome, determining 54.3% of Barthel index value at 12 months. The highest predictive value among SSEP parameters has N20-P25 amplitude ratio—34.5%. Combined application of upper limb MRC and N20-P25 amplitude ratio provided significantly stronger prognostic information—66%. Combined assessment of SSEP parameters and muscle power in acute stroke considerably improves prediction of functional outcome.

Keywords: Stroke prognosis; Somatosensory evoked potentials; Functional recovery

3.Tzvetanov P, Milanov I, **Rousseff RT**, Christova P. Can SSEP results predict functional recovery of stroke patients within the "therapeutic window"? Electromyogr Clin Neurophysiol. 2004 Jan-Feb;44(1):43-9. *ISSN 0301-150X*, Scopus, 60/4 = 15 точки.

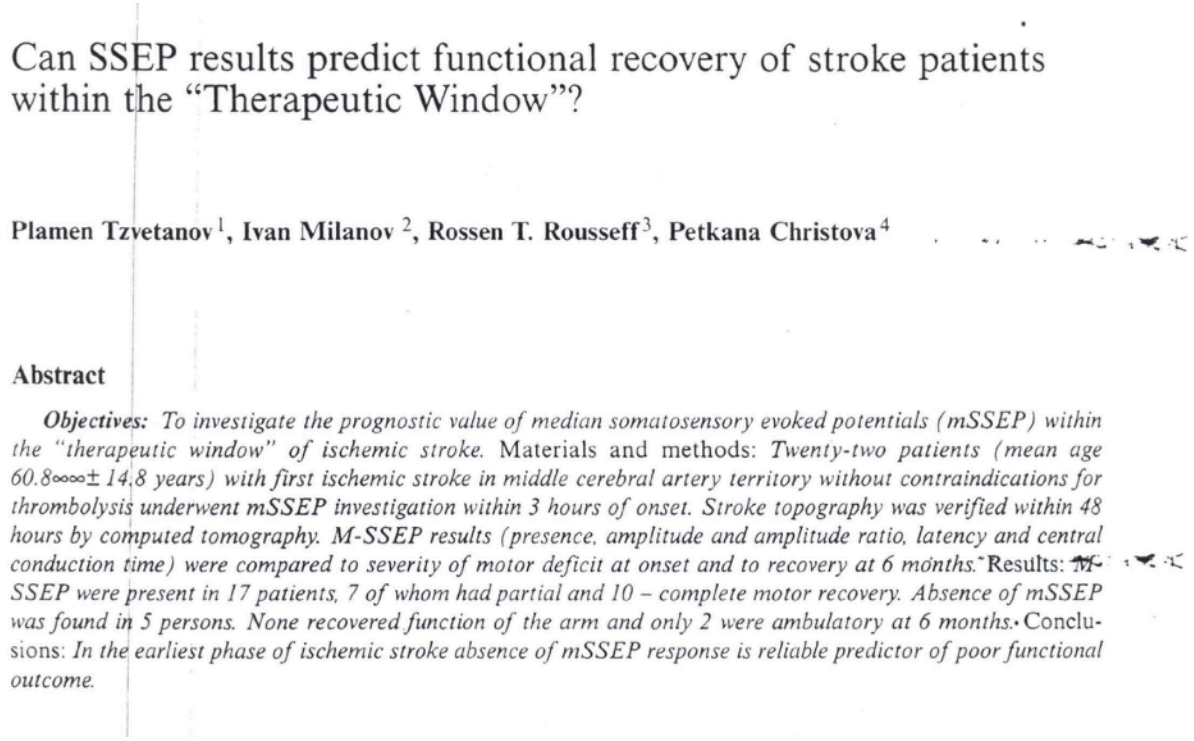
Abstract

Objectives: To investigate the prognostic value of median somatosensory evoked potentials (mSSEP) within the "therapeutic window" of ischemic stroke.

Materials and methods: Twenty-two patients (mean age 60.8 +/- 14.8 years) with first ischemic stroke in middle cerebral artery territory without contraindications for thrombolysis underwent mSSEP investigation within 3 hours of onset. Stroke topography was verified within 48 hours by computed tomography. M-SSEP results (presence, amplitude and amplitude ratio, latency and central conduction time) were compared to severity of motor deficit at onset and to recovery at 6 months.

Results: M-SSEP were present in 17 patients, 7 of whom had partial and 10--complete motor recovery. Absence of mSSEP was found in 5 persons. None recovered function of the arm and only 2 were ambulatory at 6 months.

Conclusions: In the earliest phase of ischemic stroke absence of mSSEP response is reliable predictor of poor functional outcome.



Can SSEP results predict functional recovery of stroke patients within the "Therapeutic Window"?

Plamen Tzvetanov [1], Ivan Milanov [2], Rossen T. Rousseff [3], Petkana Christova [4]

Abstract

Objectives: To investigate the prognostic value of median somatosensory evoked potentials (mSSEP) within the "therapeutic window" of ischemic stroke. Materials and methods: *Twenty-two patients (mean age 60.8±14.8 years) with first ischemic stroke in middle cerebral artery territory without contraindications for thrombolysis underwent mSSEP investigation within 3 hours of onset. Stroke topography was verified within 48 hours by computed tomography. M-SSEP results (presence, amplitude and amplitude ratio, latency and central conduction time) were compared to severity of motor deficit at onset and to recovery at 6 months.* Results: *M-SSEP were present in 17 patients, 7 of whom had partial and 10 – complete motor recovery. Absence of mSSEP was found in 5 persons. None recovered function of the arm and only 2 were ambulatory at 6 months.* Conclusions: *In the earliest phase of ischemic stroke absence of mSSEP response is reliable predictor of poor functional outcome.*

4. Tzvetanov P, **Rousseff RT.** Median SSEP changes in hemiplegic stroke: long-term predictive values regarding ADL recovery. NeuroRehabilitation. 2003;18(4):317-24. *ISSN 1053-8135 (print)*, Scopus, 60/2 = 30 точки.

Abstract

Objective: To assess the predictive value of median somatosensory evoked potentials (SSEP) in the acute phase of brain infarction or hemorrhage regarding long-term prognosis.

Materials and methods: Ninety-four stroke patients mean age 61.2, SD 11.8) were included. CT confirmed diagnoses were: cortical middle cerebral artery (MCA) infarction in 35; subcortical MCA 11; mixed 25. By size, infarctions were: massive, 29; restricted, 33; and lacunar, 9. The number of patients with thalamic hemorrhage was 8; putamenal hemorrhage, 7; other, 8. All patients presented with severe hemiparesis (54) or hemiplegia (40) with hemihipoesthesia in 89 patients. Median SSEP were recorded early (up to 7th day, mean 5.2 days, SD 0.72). SSEP parameters (presence/absence of SSEP, absolute and relative latency, amplitude of early waveforms) were compared to motor (Medical Research Council scale) and functional ability (Barthel index) at 3 and 12 months after stroke.

Results: Absolute N20 amplitudes and amplitude ratio evidenced almost similar predictive values that reached 66.4% at 12 months. Combined application of N20 and MRC gains provided significantly stronger prognostic information which reached 72%.

Conclusions: Median SSEP parameters may serve as independent predictors of outcome. Most informative in prognosis in the early stage of stroke was the combined assessment of MRC and N20-P25 amplitude ratio.

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Median SSEP changes in hemiplegic stroke: Long-term predictive values regarding ADL recovery

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Abstract. *Objective:* To assess the predictive value of median somatosensory evoked potentials (SSEP) in the acute phase of brain infarction or hemorrhage regarding long-term prognosis.

Materials and methods: Ninety-four stroke patients mean age 61.2, SD 11.8) were included. CT confirmed diagnoses were: cortical middle cerebral artery (MCA) infarction in 35; subcortical MCA 11; mixed 25. By size, infarctions were: massive, 29; restricted, 33; and lacunar, 9. The number of patients with thalamic hemorrhage was 8; putamenal hemorrhage, 7; other, 8. All patients presented with severe hemiparesis (54) or hemiplegia (40) with hemihipoesthesia in 89 patients. Median SSEP were recorded early (up to 7th day, mean 5.2 days, SD 0.72). SSEP parameters (presence/absence of SSEP, absolute and relative latency, amplitude of early waveforms) were compared to motor (Medical Research Council scale) and functional ability (Barthel index) at 3 and 12 months after stroke.

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Conclusions: Median SSEP parameters may serve as independent predictors of outcome. Most informative in prognosis in the early stage of stroke was the combined assessment of MRC and N20-P25 amplitude ratio.

5. Tzvetanov P, **Rousseff RT**, Milanov I. Lower limb SSEP changes in stroke-predictive values regarding functional recovery. Clin Neurol Neurosurg. 2003 Apr;105(2):121-7. *ISSN: 0303-8467*. Web of Science, 60/3 = 20 точки, IF за 2003 = **0.771**

Abstract

Objective: To assess the predictive value of lower limbs somatosensory evoked potentials (SSEPs) in the acute phase of stroke.

Materials and methods: 94 stroke patients (mean age: 61.2; S.D.: 11.8; 43 women) were included. Computed tomography confirmed diagnosis was cortical middle cerebral artery (MCA) infarction in 35, subcortical MCA in 11, and mixed in 25. By size, infarctions were large (29), limited (33), and lacunar (9). Thalamic haemorrhage was found in eight patients, putaminal in seven, small capsular in two, massive in two and lobar in four patients. All patients presented with hemiparesis (54) or hemiplegia (40), pure in five and combined with hemihypesthesia in 89. Tibial nerve SSEPs were recorded early in the course of the disease (up to third day). SSEP parameters (presence/absence of SSEP, absolute P40 latency, amplitude and amplitude ratio-affected/healthy side of P40-N50) were evaluated and compared with motor ability using the Medical Research Council (MRC) scale, and daily living activities using Barthel index (ADLB) followed for 3 months after stroke. Disability was assessed after the Rankin scale.

Results: The absolute amplitude of P40 has moderately strong correlation with Barthel index (r=0.63) and nearly moderate (r=-0.46) with Rankin scale at 3 months. P40 ratio exhibits weaker correlations with clinical outcome parameters. The combination of SSEP abnormalities and MRC has stronger predictive value than MRC alone (P<0.0001 vs P<0.03).

Conclusions: Tibial SSEP investigation early in stroke, independently or combined with muscle power assessment, significantly increases prognostic capability.

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Lower limb SSEP changes in stroke—predictive values regarding functional recovery

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Received 7 September 2002; accepted 28 October 2002

Abstract

Objective: To assess the predictive value of lower limbs somatosensory evoked potentials (SSEPs) in the acute phase of stroke. *Materials and methods:* 94 stroke patients (mean age: 61.2; S.D.: 11.8; 43 women) were included. Computed tomography confirmed diagnosis was cortical middle cerebral artery (MCA) infarction in 35, subcortical MCA in 11, and mixed in 25. By size, infarctions were large (29), limited (33), and lacunar (9). Thalamic haemorrhage was found in eight patients, putaminal in seven, small capsular in two, massive in two and lobar in four patients. All patients presented with hemiparesis (54) or hemiplegia (40), pure in five and combined with hemihypesthesia in 89. Tibial nerve SSEPs were recorded early in the course of the disease (up to third day). SSEP parameters (presence/absence of SSEP, absolute P40 latency, amplitude and amplitude ratio—affected/healthy side of P40-N50) were evaluated and compared with motor ability using the Medical Research Council (MRC) scale, and daily living activities using Barthel index (ADLB) followed for 3 months after stroke. Disability was assessed after the Rankin scale. *Results:* The absolute amplitude of P40 has moderately strong correlation with Barthel index ($r = 0.63$) and nearly moderate ($r = -0.46$) with Rankin scale at 3 months. P40 ratio exhibits weaker correlations with clinical outcome parameters. The combination of SSEP abnormalities and MRC has stronger predictive value than MRC alone ($P < 0.0001$ vs $P < 0.03$). *Conclusions:* Tibial SSEP investigation early in stroke, independently or combined with muscle power assessment, significantly increases prognostic capability.

Keywords: Functional prognosis; Somatosensory evoked potentials; Stroke

6.Al-Hashel JY, **Rousseff RT**, Khuraibet AJ, Tzvetanov P. Single-fiber electromyography of facial and limb muscles in diabetic patients with or without neuropathy. J Clin Neurophysiol. 2014 Oct;31(5):450-5. doi: 10.1097/WNP.0000000000000087. ***ISSN**: 0736-0258 (Print) 1537-1603 (Electronic)* IF 2014 = **1.429,** 60/4 = 15 точки

Abstract

Purpose: In diabetic patients, single-fiber electromyography (SFEMG) is often abnormal in the limb muscles and is considered unreliable in diagnosis of synaptic disorders. We aimed to compare SFEMG abnormalities of frontalis muscle (FM) and extensor digitorum communis muscle in diabetic patients with neuropathy and without neuropathy.

Methods: Stimulation SFEMG of FM and extensor digitorum communis muscle was performed in matched groups of 30 diabetic patients with neuropathy and 20 diabetic patients without neuropathy.

Results: Single-fiber electromyography in the FM was abnormal in four diabetic patients with neuropathy and in one diabetic patient without neuropathy. Changes were rather mild. Extensor digitorum communis abnormalities were significantly more frequent-in 20 diabetic patients with neuropathy and in 7 diabetic patients without neuropathy ($P < 0.001$). We never observed a patient with abnormal FM but normal extensor digitorum communis muscle.

Conclusions: In diabetes, FM exhibits rare and quite mild SFEMG changes. This muscle may be suitable for SFEMG in diabetic patients with clinical suspicion for synaptic disorder.

Single-Fiber Electromyography of Facial and Limb Muscles in Diabetic Patients With or Without Neuropathy

Jasem Y. Al-Hashel, Rossen T. Rousseff,* Adnan J. Khuraibet,* and Plamen Tzvetanov†*

Purpose: In diabetic patients, single-fiber electromyography (SFEMG) is often abnormal in the limb muscles and is considered unreliable in diagnosis of synaptic disorders. We aimed to compare SFEMG abnormalities of frontalis muscle (FM) and extensor digitorum communis muscle in diabetic patients with neuropathy and without neuropathy.

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Conclusions: In diabetes, FM exhibits rare and quite mild SFEMG changes. This muscle may be suitable for SFEMG in diabetic patients with clinical suspicion for synaptic disorder.

Key Words: Single-fiber electromyography, Neuromuscular jitter, Diabetic neuropathy, Neuromuscular transmission disorders.

(*J Clin Neurophysiol* 2014;31: 450–455)

of a diabetic patient who needs SFEMG for evaluation of suspected NMT disorder is not theoretical but rather an existing clinical challenge. However, SFEMG abnormalities in different limb muscles are found in 75% to 100% of diabetic patients with neuropathy (DN) (Bril et al., 1996; Chang and Chuang, 1996) and in 30% to 60% of diabetic persons without neuropathy (DWN) (Hendriksen et al., 1992, 1993), so the test is considered unreliable in such circumstances.

After performing SFEMG on occasional diabetic patients referred to exclude myasthenia gravis (MG), we had the impression that the facial muscles may yield normal results even in cases with advanced peripheral neuropathy. We undertook the present study to systematically test this clinical impression. Aside from its practical significance regarding the diagnostic limitations of SFEMG, it could also add to the knowledge on the pathophysiology and electrodiagnostic presentations of diabetic neuropathy.

MATERIALS AND METHODS

Patient Groups

7.Al-Hashel J, Rashad HM, **Rousseff RT.** An adult patient with ocular myasthenia and unusually long spontaneous remission. Case Rep Neurol Med. 2014;2014:372769.

doi: 10.1155/2014/372769. *ISSN: 2090-6668 (Print) ISSN: 2090-6676 (Online)* Web of Science (ESCI), 60/3 = 20

Abstract
A male patient developed ocular myasthenia gravis (MG) at the age of 33. He was anti-acetylcholine receptor antibody (anti-AChR Ab) negative. He received cholinesterase blocker for 5 months and went into a complete clinical remission that lasted untreated for 17 years. He relapsed recently with ocular symptoms only. He is now anti-AChR Ab positive and SFEMG is abnormal in a facial muscle. The patient is controlled with steroids. He had one of the longest spontaneous remissions reported in the natural history of MG, particularly unusual for an adult with the disease.

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Case Report

An Adult Patient with Ocular Myasthenia and Unusually Long Spontaneous Remission

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Academic Editor: N. Scott Litofsky

A male patient developed ocular myasthenia gravis (MG) at the age of 33. He was anti-acetylcholine receptor antibody (anti-AChR Ab) negative. He received cholinesterase blocker for 5 months and went into a complete clinical remission that lasted untreated for 17 years. He relapsed recently with ocular symptoms only. He is now anti-AChR Ab positive and SFEMG is abnormal in a facial muscle. The patient is controlled with steroids. He had one of the longest spontaneous remissions reported in the natural history of MG, particularly unusual for an adult with the disease.

8.Khuraibet AJ, **Rousseff RT**, Behbehani R, al-Shubaili AF, Khan RA. Single -fiber electromyography of masseter muscle in myasthenia gravis. Muscle Nerve. 2008, 37(4):522-5. *ISSN: 0148-639X (Print) 1097-4598 (Electronic)* IF 2008 = **2.594**

Abstract
Jitter after axonal microstimulation in the masseter muscle was studied in 30 consecutive patients (12 women) with myasthenia gravis (MG). Patients' mean age was 42.3 (12-75), median disease duration was 3 months (1-72), and onset was ocular (15 cases), oculobulbar (7), bulbar (6), or generalized (2). There were 23 newly-diagnosed patients. Nine cases developed purely ocular MG and 21 cases developed generalized MG. In the latter group, five subjects had a rapidly progressive course and 16 subjects had stable or well-controlled disease (MGFA grade 2-3). Six patients did not have circulating anti-acetylcholine receptor antibodies. Masseter single-fiber electromyography (SFEMG) was abnormal in 6 of 9 ocular MG patients and in all generalized cases (overall sensitivity 27 of 30 cases or 90%; confidence interval 79.3%-100.0% at P = 0.95). Masseter should be considered for SFEMG in diagnosis of MG, especially in cases with bulbar onset.

SHORT REPORT

ABSTRACT: Jitter after axonal microstimulation in the masseter muscle was studied in 30 consecutive patients (12 women) with myasthenia gravis (MG). Patients' mean age was 42.3 (12–75), median disease duration was 3 months (1–72), and onset was ocular (15 cases), oculobulbar (7), bulbar (6), or generalized (2). There were 23 newly-diagnosed patients. Nine cases developed purely ocular MG and 21 cases developed generalized MG. In the latter group, five subjects had a rapidly progressive course and 16 subjects had stable or well-controlled disease (MGFA grade 2–3). Six patients did not have circulating anti–acetylcholine receptor antibodies. Masseter single-fiber electromyography (SFEMG) was abnormal in 6 of 9 ocular MG patients and in all generalized cases (overall sensitivity 27 of 30 cases or 90%; confidence interval 79.3%–100.0% at $P = 0.95$). Masseter should be considered for SFEMG in diagnosis of MG, especially in cases with bulbar onset.

Muscle Nerve **37:** 522–525, 2008

SINGLE-FIBER ELECTROMYOGRAPHY OF MASSETER MUSCLE IN MYASTHENIA GRAVIS

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Accepted 17 September 2007

Single-fiber electromyography (SFEMG) remains the most sensitive method for the diagnosis of myasthenia gravis (MG).[1,20] However, the extremely high sensitivity of SFEMG reported in routinely studied muscles has recently been challenged, particularly in purposes. Here we report the diagnostic yield of masseter SFEMG in a series of consecutive MG cases.

MATERIALS AND METHODS

9.**Rousseff RT**, Khuraibet AJ, Al-Shubaili AF, Tzvetanov P. Stimulated jitter in the masseter muscle: normative values. Muscle Nerve. 2007 Feb;35(2):243-5. *ISSN: 0148-639X (Print) 1097-4598 (Electronic*), IF 2007 = **2.424,** 60/4 = 15

Abstract

Nineteen healthy volunteers (median age, 25; range, 18-51 years) were enrolled in a study to obtain normative values for stimulated jitter in the masseter muscle. Axonal microstimulation was performed via a monopolar needle electrode introduced in the masseter 2-2.5 cm above the mandibular angle on the line connecting it with the lateral canthus. The recording single-fiber electromyography (SFEMG) electrode was inserted anteriorly in the twitching area of the muscle. The mean consecutive difference (MCD) values for the 426 endplates studied followed a distribution skewed to the left, with a minimum value of 4.3 micros, maximal 44.7 micros, and a maximum of distribution at 11 micros. Mean pooled MCD measured 16.0 micros, and the mean of mean MCD per study was 13.6 micros. The value of the 95th upper percentile for an individual fiber was 29.3 micros. We suggest an upper normal limit for mean MCD per study of 21 micros and upper normal limit of MCD for individual fibers of 30 micros. The stimulated jitter study of masseter muscle is easy and reliable.

SHORT REPORT

ABSTRACT: Nineteen healthy volunteers (median age, 25; range, 18–51 years) were enrolled in a study to obtain normative values for stimulated jitter in the masseter muscle. Axonal microstimulation was performed via a monopolar needle electrode introduced in the masseter 2–2.5 cm above the mandibular angle on the line connecting it with the lateral canthus. The recording single-fiber electromyography (SFEMG) electrode was inserted anteriorly in the twitching area of the muscle. The mean consecutive difference (MCD) values for the 426 endplates studied followed a distribution skewed to the left, with a minimum value of 4.3 μs, maximal 44.7 μs, and a maximum of distribution at 11 μs. Mean pooled MCD measured 16.0 μs, and the mean of mean MCD per study was 13.6 μs. The value of the 95th upper percentile for an individual fiber was 29.3 μs. We suggest an upper normal limit for mean MCD per study of 21 μs and upper normal limit of MCD for individual fibers of 30 μs. The stimulated jitter study of masseter muscle is easy and reliable.

Muscle Nerve **35:** 243–245, 2007

STIMULATED JITTER IN THE MASSETER MUSCLE: NORMATIVE VALUES

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10.Behbehani R, Ali A, Al-Omairah H, **Rossen T Rousseff**. Optimization of Spectral Domain Optical Coherence Tomography and Visual Evoked Potentials to Identify Unilateral Optic Neuritis. Multiple Sclerosis and Related Disorders epub Febr 8, 2020. *ISSN 2211-0348* DOI: https://doi.org/10.1016/j.msard.2020.101988, IF = **2.889,** 60/4 = 15

Abstract

Background: Optic neuritis is a common manifestation of multiple sclerosis and frequently the presenting sign. The diagnosis of MS is heavily based on MRI findings but the latter is relatively insensitive in detecting optic nerve lesions. Identification of optic nerve lesion using ancillary tools such spectral-domain optical coherence tomography (SDOCT) by measuring the retinal nerve fiber layer (RNFL) and ganglion cell-inner plexiform layer (GCIPL), and visual-evoked potentials latencies (VEP) may facilitate early diagnosis and treatment of multiple sclerosis.

Objective: To determine the optimal of SDOCT measures in RFNL and GCIPL and the VEP latency value for the identification of a prior symptomatic optic nerve lesion.

Methods: Thirty patients with diagnosed clinically with optic neuritis and fifty healthy control subjects were tested with SDOCT and VEP and the sensitivity, specificity, negative and positive predictive values of optimal values from healthy controls and optic neuritis patients were determined of for the identification unilateral optic nerve lesion.

Results: The inter-eye GCIPL difference of 3.5 µm is highly sensitive (100%) and specific (98%) in identifying unilateral optic nerve lesion, while lowest 5th percentile normal GCIPL threshold values of 71 µm was highly sensitive (100%) but less specific (83.3%). The inter-eye RNFL difference of 5.5 µm had a sensitivity of 70% and specificity of 90% in identifying optic nerve lesion while the lower 5th percentile normal RNFL value of 92.3 µm was poorly sensitive (40%). Finally, the 95th percentile normal VEP latency of 104.50 milliseconds had sensitivity of 80% and specificity of 76% in identifying optic nerve lesion.

Conclusions: The inter-eye GCIPL difference is a powerful index for identifying unilateral optic nerve lesion, while the inter-eye RNFL difference and 95th percentile normal VEP latency had very good sensitivity and specificity. These measures can be useful in the evaluation of the first demyelinating event of MS and therefor can facilitate early diagnosis and therapy.

Original Article

Optimization of spectral domain optical coherence tomography and visual evoked potentials to identify unilateral optic neuritis

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Visual evoked potentials

ABSTRACT

Background: Optic neuritis is a common manifestation of multiple sclerosis and frequently the presenting sign. The diagnosis of MS is heavily based on MRI findings but the latter is relatively insensitive in detecting optic nerve lesions. Identification of optic nerve lesion using ancillary tools such spectral-domain optical coherence tomography (SDOCT) by measuring the retinal nerve fiber layer (RNFL) and ganglion cell-inner plexiform layer (GCIPL), and visual-evoked potentials latencies (VEP) may facilitate early diagnosis and treatment of multiple sclerosis.

Objective: To determine the optimal of SDOCT measures in RFNL and GCIPL and the VEP latency value for the identification of a prior symptomatic optic nerve lesion.

Methods: Thirty patients with diagnosed clinically with optic neuritis and fifty healthy control subjects were tested with SDOCT and VEP and the sensitivity, specificity, negative and positive predictive values of optimal values from healthy controls and optic neuritis patients were determined of for the identification unilateral optic nerve lesion.

Results: The inter-eye GCIPL difference of 3.5 µm is highly sensitive (100%) and specific (98%) in identifying unilateral optic nerve lesion, while lowest 5th percentile normal GCIPL threshold values of 71 µm was highly sensitive (100%) but less specific (83.3%). The inter-eye RNFL difference of 5.5 µm had a sensitivity of 70% and specificity of 90% in identifying optic nerve lesion while the lower 5th percentile normal RNFL value of 92.3 µm was poorly sensitive (40%). Finally, the 95th percentile normal VEP latency of 104.50 milliseconds had sensitivity of 80% and specificity of 76% in identifying optic nerve lesion.

Conclusions: The inter-eye GCIPL difference is a powerful index for identifying unilateral optic nerve lesion, while the inter-eye RNFL difference and 95th percentile normal VEP latency had very good sensitivity and specificity. These measures can be useful in the evaluation of the first demyelinating event of MS and therefor can facilitate early diagnosis and therapy.

По показател Г7.

1.Rashad HM, Youssry D, Mansour D, Kilany A, Al-Hashel J, Khuraibet A, Kamel W, and **Rossen T Rousseff**. Post-bariatric surgery peripheral neuropathies: Kuwaiti experience. Egyptian Journal of Neurology, Psychiatry and Neurosurgery 2019 December, 55(1): *ISSN 16878329, 11101083*
DOI: 10.1186/s41983-019-0064-0 SJR 2019 = 0.16 Scopus

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The Egyptian Journal of Neurology, Psychiatry and Neurosurgery

RESEARCH Open Access

Post-bariatric surgery peripheral neuropathies: Kuwaiti experience

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Abstract

Background: Obesity is a major global health problem. Kuwait has a very high prevalence of obesity, and consequently, the number of bariatric surgeries is rising.

Objectives: The aim of this study is to analyze the clinical presentation and electrodiagnostic features of peripheral nerve complications following bariatric surgery.

Subjects and methods: We retrospectively involved a convenience sample of patients presenting at a tertiary referral center and analyzed the patterns and frequency of peripheral nerve involvement, correlations with operative techniques, perioperative complications, nutritional status, possible risk factors, and functional impairment.

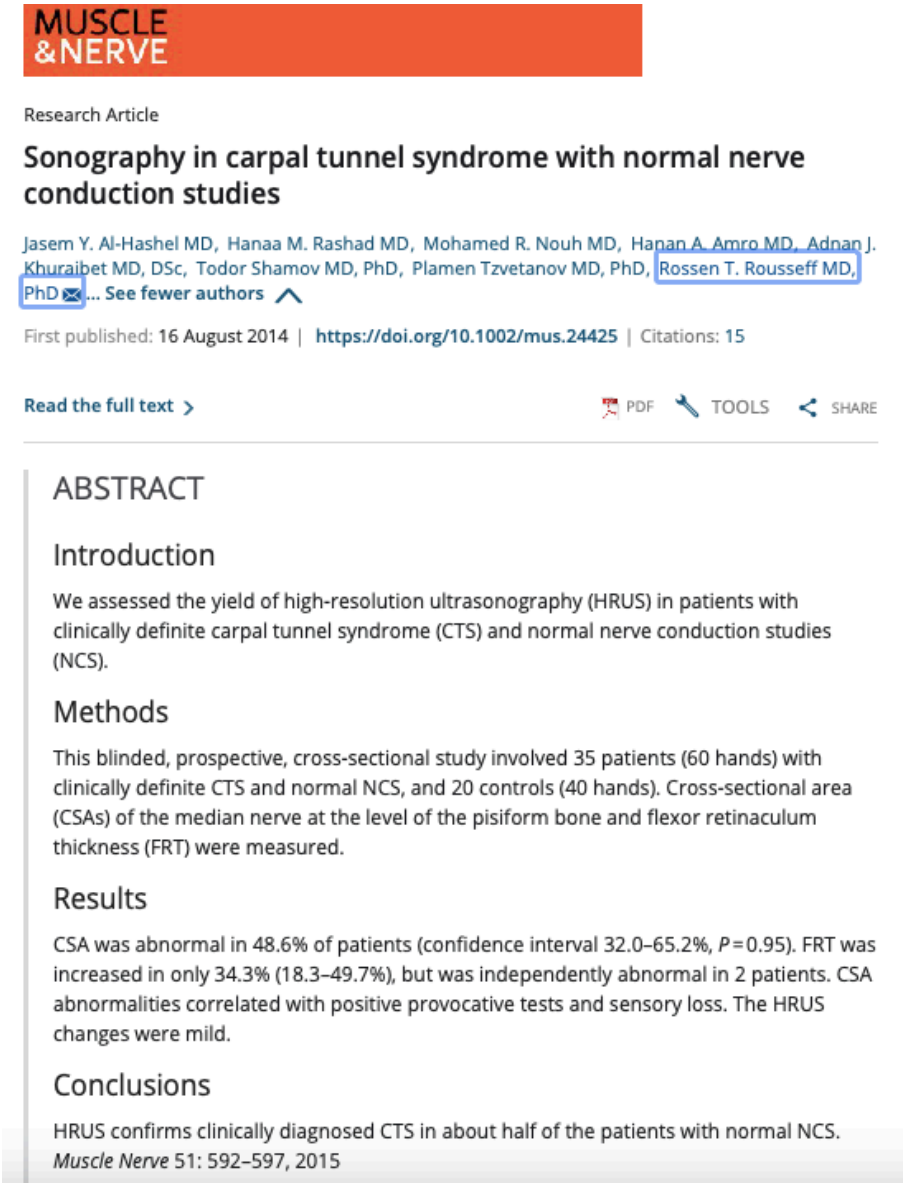
Results: Among the 58 cases, 23 presented with chronic distal symmetrical sensorimotor neuropathy, 10 suffered from small fiber neuropathy, 22 had mononeuropathies, 2 patients had acute axonal sensorimotor neuropathy, and only 1 patient had lumbar plexopathy. In 22 patients, we observed mononeuropathies (10 cases of carpal tunnel syndrome, 7 cases of peroneal compression at the knee, 4 cases of ulnar neuropathies at the elbow, and 1 case of meralgia paresthetica). Rapid weight loss and protracted postoperative vomiting tended to correlate with generalized neuropathies, while focal compression with loss of the protective subcutaneous tissue pad was associated with mononeuropathies. All patients suffered from a deficiency of at least 1 micronutrient. Compliance with supplementary therapy was poor. Some post-bariatric neuropathies interfere severely with patients' functional status.

Conclusion: Prevention by close follow-up, nutritional intervention, and patient education to avoid habitual postures related to nerve compression is appropriate.

Keywords: Peripheral neuropathy, Neuromuscular complications, Bariatric surgery, Weight loss

2.Al-Hashel JY, Rashad HM, Nouh MR, Amro HA, Khuraibet AJ, Shamov T, Tzvetanov P, **Rousseff RT**. Sonography in carpal tunnel syndrome with normal nerve conduction studies. Muscle Nerve. 2015 Apr;51(4):592-7. *ISSN: 0148-639X (Print) 1097-4598 (Electronic)* doi: 10.1002/mus.24425. Epub 2015 Feb 24. **IF 2015 = 2.713** 60/8 = 7.5

Introduction: We assessed the yield of high-resolution ultrasonography (HRUS) in patients with clinically definite carpal tunnel syndrome (CTS) and normal nerve conduction studies (NCS).
Methods: This blinded, prospective, cross-sectional study involved 35 patients (60 hands) with clinically definite CTS and normal NCS, and 20 controls (40 hands). Cross-sectional area (CSAs) of the median nerve at the level of the pisiform bone and flexor retinaculum thickness (FRT) were measured.
Results: CSA was abnormal in 48.6% of patients (confidence interval 32.0-65.2%, P = 0.95). FRT was increased in only 34.3% (18.3-49.7%), but was independently abnormal in 2 patients. CSA abnormalities correlated with positive provocative tests and sensory loss. The HRUS changes were mild.
Conclusions: HRUS confirms clinically diagnosed CTS in about half of the patients with normal NCS.



MUSCLE & NERVE

Research Article

Sonography in carpal tunnel syndrome with normal nerve conduction studies

Jasem Y. Al-Hashel MD, Hanaa M. Rashad MD, Mohamed R. Nouh MD, Hanan A. Amro MD, Adnan J. Khuraibet MD, DSc, Todor Shamov MD, PhD, Plamen Tzvetanov MD, PhD, Rossen T. Rousseff MD, PhD ... See fewer authors

First published: 16 August 2014 | https://doi.org/10.1002/mus.24425 | Citations: 15

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ABSTRACT

Introduction

We assessed the yield of high-resolution ultrasonography (HRUS) in patients with clinically definite carpal tunnel syndrome (CTS) and normal nerve conduction studies (NCS).

Methods

This blinded, prospective, cross-sectional study involved 35 patients (60 hands) with clinically definite CTS and normal NCS, and 20 controls (40 hands). Cross-sectional area (CSAs) of the median nerve at the level of the pisiform bone and flexor retinaculum thickness (FRT) were measured.

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CSA was abnormal in 48.6% of patients (confidence interval 32.0–65.2%, *P* = 0.95). FRT was increased in only 34.3% (18.3–49.7%), but was independently abnormal in 2 patients. CSA abnormalities correlated with positive provocative tests and sensory loss. The HRUS changes were mild.

Conclusions

HRUS confirms clinically diagnosed CTS in about half of the patients with normal NCS.

Muscle Nerve 51: 592–597, 2015

3.Al-Ajmi AM, Cooper PE, **Rousseff RT**. Aphemia after infarction of the left precentral gyrus and premotor area. Can J Neurol Sci. 2012 Sep;39(5):658-9. *ISSN 0317-1671 (Print) 0317-1671 (Linking)* IF 2012 **= 1.332**

BRIEF COMMUNICATIONS

Aphemia after Infarction of the Left Precentral Gyrus and Premotor Area

Abdullah M. Al-Ajmi, Paul E. Cooper, Rossen T. Rousseff

Can J Neurol Sci. 2012; 39: 658-659

The term "aphemia" is now used to describe a motor disorder that affects speech production but leaves the comprehension of spoken and written language intact. Aphemia is a specific form of mutism. Aphemia was formerly referred to as phonetic disintegration, pure anarthria, apraxic dysarthria, cortical dysarthria, verbal apraxia, subcortical motor aphasia, pure motor aphasia, small or mini Broca's aphasia, pure word mutism and kinetic speech production disorder, reflecting the differing views on the nature of the underlying disorder (e.g., aphasia, dysarthria, apraxia). This condition may lie between pure speech disorders (i.e., dysarthrias) and language disorders (i.e., aphasias) and it usually reflects damage in the left frontal operculum[1]. Aphemia may emerge during recovery from more extensive deficits. Occasional cases of progressive aphemia resulting from selective left temporal lobe degeneration have been reported[2]. In addition, cases of epileptic aphemia have been described[3].

Case

movements of the right hand and moderately weak finger extension was present in the right hand. Manual strength testing was otherwise normal throughout. Deep tendon reflexes were normal and flexor plantar responses were present. The sensory exam, including responsiveness to light touch, temperature, pinprick and vibration, was normal. The cerebellar examination was normal as were stance and gait.

The patient's presentation was consistent with an ischemic stroke involving the left middle cerebral artery (MCA) distribution. He was admitted to the hospital for a diagnostic work-up and management.

An unenhanced computed tomography scan of the head confirmed an infarction involving the left precentral gyrus and premotor area (Figure).

The blood work showed an elevated low density lipoprotein level of 2.6 mmol/L, but other blood tests were normal. An electrocardiogram showed a normal sinus rhythm and echocardiogram revealed global hypokinesia, a dilated left ventricle and an ejection fraction of 15-20%. The carotid Doppler ultrasound was normal.

4.Al-Ajmi AM, Jayappa S, **Rousseff RT**. Isolated severe median mononeuropathy caused by a jellyfish sting. J Clin Neuromuscul Dis. 2013 Jun;14(4):188-93. *ISSN 1522-0443, online ISSN 1537-1611* doi: 10.1097/CND.0b013e31828ee941. Web of Science, PubMed. SJR 2013 = 0.318

Abstract
Neuropathies caused by jellyfish stings are extremely rare and poorly studied. A 20-year-old female patient was stung on the volar aspect of the right forearm by an unidentified species of jellyfish. Local cutaneous reaction was followed within few days by severe median mononeuropathy, involving the motor and sensory branches to the hand and forearm but sparing the palmar branch. The patient had neuropathic pain relieved by pregabaline. Electrodiagnostic studies confirmed a demyelinating lesion. Ultrasound and magnetic resonance imaging of the median nerve revealed uniform swelling with mild uptake of contrast along the forearm. Within 2 months, strength improved significantly, pain subsided, and numbness partially resolved. Literature review and discussion of the possible mechanisms and implications of this rare effect of marine animal envenomation is presented. Jellyfish sting may cause focal mononeuropathies most probably because of the local effects of the toxins.

Isolated Severe Median Mononeuropathy Caused by a Jellyfish Sting

Abdullah M. Al-Ajmi, MD, FRCPC, Sateesh Jayappa, MBBS, DNR,† and Rossen T. Rousseff, MD, PhD‡*

Abstract

Neuropathies caused by jellyfish stings are extremely rare and poorly studied. A 20-year-old female patient was stung on the volar aspect of the right forearm by an unidentified species of jellyfish. Local cutaneous reaction was followed within few days by severe median mononeuropathy, involving the motor and sensory branches to the hand and forearm but sparing the palmar branch. The patient had neuropathic pain relieved by pregabaline. Electrodiagnostic studies confirmed a demyelinating lesion. Ultrasound and magnetic resonance imaging of the median nerve revealed uniform swelling with mild uptake of contrast along the forearm. Within 2 months, strength improved significantly, pain subsided, and numbness partially resolved. Literature review and discussion of the possible mechanisms and implications of this rare effect of marine animal envenomation is presented. Jellyfish sting may cause focal mononeuropathies most probably because of the local effects of the toxins.

Key Words: jellyfish sting, neuropathy, mononeuritis, median nerve, marine animal envenomation

(*J Clin Neuromusc Dis* 2013;14:188–193)

CASE REPORT

A 20-year-old left-handed woman presented to the electromyography laboratory with numbness and pains of the right forearm and hand. Her symptoms started 21 days ago while swimming when she was stung by a jellyfish. The species of the animal is not known. The sting involved the volar aspect of the right wrist and distal forearm. Stinging and pinching pain and swelling immediately developed over that area. A skin rash appeared on the right wrist and the distal half of the volar aspect of forearm. Systemic symptoms or signs were absent. Over the next 2 days, she started to get numbness and weakness in the right hand. She had taken pregabalin, which helped her pains.

The patient is otherwise healthy. On examination, on the volar aspect of the distal half of the right forearm, there was skin rash presenting as numerous, irregular, oval-shaped, brownish crusting papules measuring 0.3–0.5 cm in size. They were situated close to each

5. Al-Ajmi A, **Rousseff RT**, Khuraibet AJ. Iatrogenic femoral neuropathy: two cases and literature update. J Clin Neuromuscul Dis. 2010 Dec;12(2):66-75. doi: 10.1097/CND.0b013e3181f3dbe7. PMID: 21386773.

Iatrogenic femoral neuropathy is an uncommon surgical or obstetric complication that may be underreported. It results from compression, stretch, ischemia, or direct trauma of the nerve during hip arthroplasty, self-retaining retractor use in pelvicoabdominal surgery, lithotomy positioning for anesthesia or labor, and other more rare causes. Decreasing incidence of this complication after abdominal and gynecologic surgery but increase in its absolute numbers after hip arthroplasty has emerged over the last decade. We describe two illustrative cases related respectively to lithotomy positioning and self-retaining retractor use. The variability in clinical presentation of iatrogenic femoral nerve lesions, some new insights in their diverse pathophysiology, and in the diagnostic and treatment options are discussed with an update from the literature.

Iatrogenic Femoral Neuropathy: Two Cases and Literature Update

Abdullah Al-Ajmi, MD, FRCPC, Rossen T. Rousseff, MD, PhD,† and Adnan J. Khuraibet, MD, DSc†*

Abstract

Iatrogenic femoral neuropathy is an uncommon surgical or obstetric complication that may be underreported. It results from compression, stretch, ischemia, or direct trauma of the nerve during hip arthroplasty, self-retaining retractor use in pelvicoabdominal surgery, lithotomy positioning for anesthesia or labor, and other more rare causes. Decreasing incidence of this complication after abdominal and gynecologic surgery but increase in its absolute numbers after hip arthroplasty has emerged over the last decade. We describe two illustrative cases related respectively to lithotomy positioning and self-retaining retractor use. The variability in clinical presentation of iatrogenic femoral nerve lesions, some new insights in their diverse pathophysiology, and in the diagnostic and treatment options are discussed with an update from the literature.

Key Words: mononeuropathy, iatrogenic, femoral nerve, postoperative complication, electromyography

(*J Clin Neuromusc Dis* 2010;12:66–75)

postoperative iatrogenic femoral neuropathy has come to attention. It may complicate a wide spectrum of interventions: gynecologic,[10,11] colorectal,[12,13] urologic[14,15] or vascular surgery,[16] renal transplantation,[17,18] hip arthroplasty,[19–21] herniorrhaphy,[22,23] etc.

A number of large studies and reviews on iatrogenic femoral neuropathy appear in surgical and anesthesia journals.[24–27] They suggest changes in the incidence of this condition after different procedures over the last decades and provide additional insights into its pathophysiology. Neurologic literature on the subject seems scarce.[1,28–30] We present two illustrative cases and an update of the literature emphasizing the neurologic aspects of iatrogenic femoral neuropathy (IFN) and recent developments regarding its incidence, mechanisms, and treatment.

6. Rousseff RT, Tzvetanov P. False localising levels in spinal cord compression. NeuroRehabilitation 21 (2006) 219–222

Abstract. Objective: To describe three cases with false localising levels illustrating the difficulty in clinical diagnosis of spinal cord compression. Patients and methods: Three patients (aged 53, 55 and 57 years) developed acute (in one) and subacute (in two) spinal cord syndrome with paraparesis, bladder symptoms and sensory levels suggesting lower thoracic or higher lumbar involvement.
Imaging at suspected levels was normal. Follow-up investigations after a significant delay showed compression at higher levels (up to 11 segments). Diagnoses were surgically verified. In one patient who died, post mortem investigation discloseed a caudally situated artery of Adamkiewicz and absent vicarious vessels at T7–T8 that are usually present in such cases.
Conclusions: The well known but rare phenomenon of false localizing sensory levels in spinal cord syndromes should be kept in mind. Its causes can lie in remote higher levels of compressive lesion or in vascular compromise due to variants of the blood supply.

NeuroRehabilitation 21 (2006) 219–222
IOS Press

False localising levels in spinal cord compression

Rossen T. Rousseff and Plamen Tzvetanov*
Department of Neurology and Neurosurgery, Medical University, Pleven, Bulgaria

Abstract. *Objective:* To describe three cases with false localising levels illustrating the difficulty in clinical diagnosis of spinal cord compression.
Patients and methods: Three patients (aged 53, 55 and 57 years) developed acute (in one) and subacute (in two) spinal cord syndrome with paraparesis, bladder symptoms and sensory levels suggesting lower thoracic or higher lumbar involvement. Imaging at suspected levels was normal. Follow-up investigations after a significant delay showed compression at higher levels (up to 11 segments). Diagnoses were surgically verified. In one patient who died, post mortem investigation discloseed a caudally situated artery of Adamkiewicz and absent vicarious vessels at T7–T8 that are usually present in such cases.
Conclusions: The well known but rare phenomenon of false localizing sensory levels in spinal cord syndromes should be kept in mind. Its causes can lie in remote higher levels of compressive lesion or in vascular compromise due to variants of the blood supply.

Keywords: Spinal cord, neuroimaging, somatosensory evoked potentials, false localizing levels

7. Платиканов В, **Р Русев**. Нозокомиални пневмонии – сериозен клиничен проблем. Анестезиология и интензивно лечение, 2003, 30 (3), 35-40.

НОЗОКОМИАЛНИ ПНЕВМОНИИ - СЕРИОЗЕН КЛИНИЧЕН ПРОБЛЕМ (ОБЗОР)

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Резюме: Авторите представят литературен обзор, касаещ вътреболничната пневмония и пневмония при пациенти на изкуствена белодробна вентилация. Обръща се особено внимание на предразполагащите и патогенетичните фактори. Коментират се основните микробни причинители и разликата с пневмониите, придобити в обществото. Представени са възможните начини за диагностика, съответно с тяхната специфичност и чуствителност. Методологически са систематизирани профилактичните мероприятия и възможностите за лечение, както и важността на взетото правилно лечение за инициална широкоспектърна терапия, съобразена с особеностите на локалната болнична микробиологична ситуация.

Ключови думи: нозокомиална пневмония,етиология,патогенеза,лечение.

V.Platikanov, R.Rousseff. NOSOCOMIAL PNEUMONIA - A SERIOUS CLINICAL PROBLEM. REVIEW OF THE LITERATURE

Summary: The authors present a review of the literature concerning the nosocomial pneumonia. The topics are ethiological strains, pathways, diagnistic posibilities, CDC clinical and radiological criteria as well the prevention and treatment opportunities. A few therapeutical shemas as well the relationship of the therapy with the local microbiological situation are discussed.

Key words: nosocomial pneumonia, ethiology, pathway, treatment.

8. Платиканов В, Цветков В, Русев Р, Петров Н. Синдром на „инсипиден диабет“ при пациенти с травма на гръбначния мозък в шийния отдел.

СИНДРОМ НА "ИНСИПИДЕН ДИАБЕТ" ПРИ ПАЦИЕНТИ С ТРАВМА НА ГРЪБНАЧНИЯ МОЗЪК В ШИЕН ОТДЕЛ

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Резюме: Авторите представят синдром на полиурия, полидипсия, изостенурия и серумни електролитни нарушения при 14 пациенти с тежка миелитична шийна травма. Всичките са преживяли първите 10 дни след инцидента. При 11 е осъществена хирургична стабилизация. 8 -12 дни след травмата диурезата се покачва до 12 л/денонощие, което не е предизвикано от диуретици. Мониторирани са системни артериални налягания, сърдечна честота, насищане на Нв с кислород. Часова диуреза, серумни електролитни концентрации и относително тегло на урината са измервани периодично. Прилагане на АДХ капково в носа и адекватна рехидратация са методите на лечение на конкретния синдром. Серумните електролити показаха средно занижени стойности. Авторите заключават, че този синдром, различно изразен по тежест при различни случаи, не е необичайна находка при пациенти с миелитични шийни травми. Прилагането на АДХ е адекватно лечебно действие. Този вариант на безвкусен диабет е временен феномен.

Ключови думи: миелитична шийна травма, безвкусен диабет.

V. Platikanov, V. Tzvetkov, R. Rousseff, N. Petrov. DIABETES INSIPIDUS SYNDROME IN PATIENTS WITH SEVERE CERVICAL SPINAL CORD INJURY

Summary: The authors contribute the syndrom of polyurua, polydipsia, isostenuria and electrolyte disturbances in 14 patients with cervical spinal cord injury. All survive the first 10 days after the trauma. 11 were surgicaly stabilized. 8-12 days after the trauma diuresis increases up to 12 l/d, not induced by high dosis of diuretics. The RR, CVP, HR, HbSaO2 were monitored. Hour diuresis, serum sodium, serum potassium, urine osmotic gravity were repeatedly measured. The adequate rehydration and applying of ADH-drops intranasaly were treatment methods. Serum electrolytes showed moderate decreased levels. We conclude, this syndrom differently weighted in different cases is not an unusual finding in patients with severe cervical spinal cord injury. Substitution of ADH is an adequate intervention. This variant of diabetes insipidus is a temporary event.

Key words:cervical spinal cord injury, diabetes insipidus.

9. Аспарухов А, Русев Р. Исторически преглед на оперативните методи за реконструкция на предната кръстосана връзка на коляното. Ортопедия и Травматология, 2000, 36 (3), 520-530.

Orthop. Trauma Vol.36, 3.2000

История на ортопедията и травматологията • History of Orthopaedics and Traumatology

ИСТОРИЧЕСКИ ПРЕГЛЕД НА ОПЕРАТИВНИТЕ МЕТОДИ ЗА РЕКОНСТРУКЦИЯ НА ПРЕДНАТА КРЪСТОСАНА ВРЪЗКА НА КОЛЯНОТО*

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A HISTORICAL SURVEY OF METHODS FOR OPERATIVE RECONSTRUCTION OF THE ANTERIOR CRUCIATE LIGAMENT OF THE KNEE

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Amédée Bonnet (1809-1858) (Фиг 1), хирург от Hôtel-Dieu de Lyon, е един от пионерите в изучаването на травматичните увреди на коленните лигаменти. През 1845 година, той публикува своя двутомник в обем от 1300 страници, в който подробно излага резултатите от проучванията си върху механизма на връзковите увреди на коляното, извършени на трупни препарати (11, 12). Проксималната локализация на увредата на предната кръстосана връзка (ПКВ) според Bonnet е много по-честа в сравнение с тази в тибиалната инсерция, както още че инцидента на травмата винаги е съпроводен от слухово доловимо "изпращяване" от разкъсването на връзката, с последващ хемартроза. Той първи описва феномена на субluксация при лезия на ПКВ [...des déplacements qui font croire (une luxation incomplète"), макар че още през 1836 година братя Weber от Göttingen съобщават за предно-задно изместване на тибията след тази увреда (83). За лечение на пациентите с нестабилни колена Amédée Bonnet използувал ортеза, снабдена с шарнир. J.Stark от Edinburgh описва през 1850 година двама пациенти с пресна увреда на кръстосана връзка, лекувани с ортеза и това вероятно е първото съобщение в англоезичната литература (80).

Терминът "вътреставно разстройство на коляното" ("internal derangement of the knee") е въведен от William Hey от Leeds, Англия още през 1782 година, но според разбирането на автора, той се отнася за менискалните лезии, без да се съобщава нищо за кръстосаните връзки (35). Френският хирург и гинеколог Paul Segond посочва през 1879 година четирите основни клинични прояви на увредената ПКВ (76):1) Силна ставна болка от нарушената сетивна инервация на връзката 2) Слухово доловимото "изпращяване" през време на травмата 3) Ставна ефузия (хемартроза) в първите часове след травмата и 4) Патологично повишеното предно-задно измества-

Amédée Bonnet (1809-1858) (Fig. 1), a surgeon at Hôtel-Dieu de Lyon, ranks among the pioneers in studying the traumatic injuries of knee ligaments. In a two-volume monograph of 1300 pages, published in 1845, he announced in detail the results of his cadaver experiments on the mechanism of knee ligament injuries. (11, 12). According to Bonnet proximal disruption of the anterior cruciate ligament (ACL) is far more frequent than that of the tibial insertion. Rupture is always accompanied by an audible "click" and is followed by hemarthrosis. Bonnet was the first to delineate the phenomenon of knee subluxation resulting from ACL lesions ("...des déplacements qui font croire a une luxation incomplète"), although it was in 1838 when the Weber brothers reported "anterior-posterior displacement of tibia" after such a lesion (83). In treatment of knee instability Bonnet used an orthosis with hinges. J. Stake from Edinburgh described in 1850 two patients with acute injury of ACL, treated with orthosis and this probably is the first report on the subject in the English-language literature (80).

The concept of "internal derangement of the knee" was introduced by William Hey from Leeds, England, as early as 1782, but the author applies it only to meniscal lesions, not mentioning the cruciates (35). The French surgeon and gynaecologist Paul Segond in 1879 identified the four principal clinical features of ACL disruption: 1) severe joint pain due to damage of ligament nerves; 2) audible click at the moment of injury; 3) development of joint effusion (hemarthrosis) in the first hours after injury and 4) abnormally increased anterior-posterior translation of the tibia in the sagital plane. Segond was also the man to describe traction injury of the iliotibial tract and the Gerdy tubercle – the so-called Segond fracture (78). Because of its mechanism – knee torsion in internal rotation and slight degree of flexion – this fracture is almost always combined with ACL lesion.

Mayo Robson in 1885 performed the first opera-

10. Фанди Г, Аспарухов А, Русев Р. Ендоскопска декомпресия на N. medianus при синдрома на карпалния канал. Ортопедия и травматология 1998, 34 (3), 113-116.

Orthop. Trauma Vol.34, 3.1998

ЕНДОСКОПСКА ДЕКОМПРЕСИЯ НА N. MEDIANUS ПРИ СИНДРОМА НА КАРПАЛНИЯ ТУНЕЛ

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ENDOSCOPIC DECOMPRESSION OF MEDIAN NERVE IN CARPAL TUNNEL SYNDROME

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РЕЗЮМЕ

Ендоскопският метод за декомпресия на срединния нерв в карпалния тунел бе въведен като алтернатива на конвенционалната открита декомпресия.

От януари 1994 до януари 1996 година извършихме ендоскопска декомпресия на карпалния тунел (ЕДКТ) при 44 ръце (39 пациенти) на възраст от 31 до 76 години. Като причина за компресията преобладават хормоналните отклонения. Продължителността на симптоматиката преди операцията е била 18 месеца. Наред със стандартизираното клинично изследване при всички пациенти предоперативно е проведено рутинно ултразвуково скениране, рентгенография и електромиография. Пациентите са оперирани ендоскопски по метода на Orr с един проксимален достъп и набор Acufex.

Подобрение в субективната симптоматика непосредствено следоперативно настъпва при 26%. Сетивността е без разлика спрямо симетричната ръка в 72%. Теста на Weber е със стойности средно 5.3 mm. Електродиагностично подобрение наблюдавахме в 58%, а пълно нормализиране - в 34%.

Следоперативните усложнения включват 4 случая с транзиторна neuropraxia за общия сетивен нерв за трето междупръстно пространство. При два случая с ХБН на диализа бяха наблюдавани хематоми в мястото на инзицията. Три случая с рецидив на компресията бяха реоперирани открито.

ЕДКТ е един усложнен и технически зависим оперативен метод и като такъв от една страна оскъпява разходите по лечението, а от друга - значително увеличава рисковете от усложнения.

КЛЮЧОВИ ДУМИ

синдром на карпалния тунел, ендоскопска ретинакулотомия

ABSTRACT

The endoscopic method for decompression of n. medianus in the carpal tunnel is well established as an alternative of the conventional method of open decompression. For the period January 1994 - January 1996 the endoscopic decompression of the carpal tunnel (EDCT) was applied in 44 hands (39 patients) aged 31 to 76. The hormonal aberrations predominated as a reason for the compression. The average duration of the symptoms before surgery has been 18 months. In all patients together with the standard clinical examination and routine ultrasonic scanning, x-ray pictures and electromyography have been preoperatively done. Patients were surgically treated by the endoscopic method of Orr with one proximal approach (Acufex Inc).

An improvement of the subjective symptoms immediately after surgery was observed in 26%. Sensitivity was without any difference compared to symmetric hand in 72%. The mean values of the two point discrimination test were 5.5 mm. Electrociagnostic improvement was observed in 58% and complete recovery - in 34% of patients.

The postoperative complications include 4 cases with transitory neuropraxia for the common sensory nerve for the third interdigital space. In two cases with chronic renal insufficiency subjects to dialysis, hematoma in the place of incision was observed. Three cases with recurrence of the compression were reoperated by conventional open procedure.

EDCT is a complex and technically dependent procedure which raises the cost of the treatment; risks of complications are significantly increased.

KEY WORDS

carpal tunnel syndrome, endoscopic decompression

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Публикации по показател Г8

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ОРТОПЕДИЯ
И
ТРАВМАТОЛОГИЯ
ORTOPEDIA I TRAVMATOLOGIA

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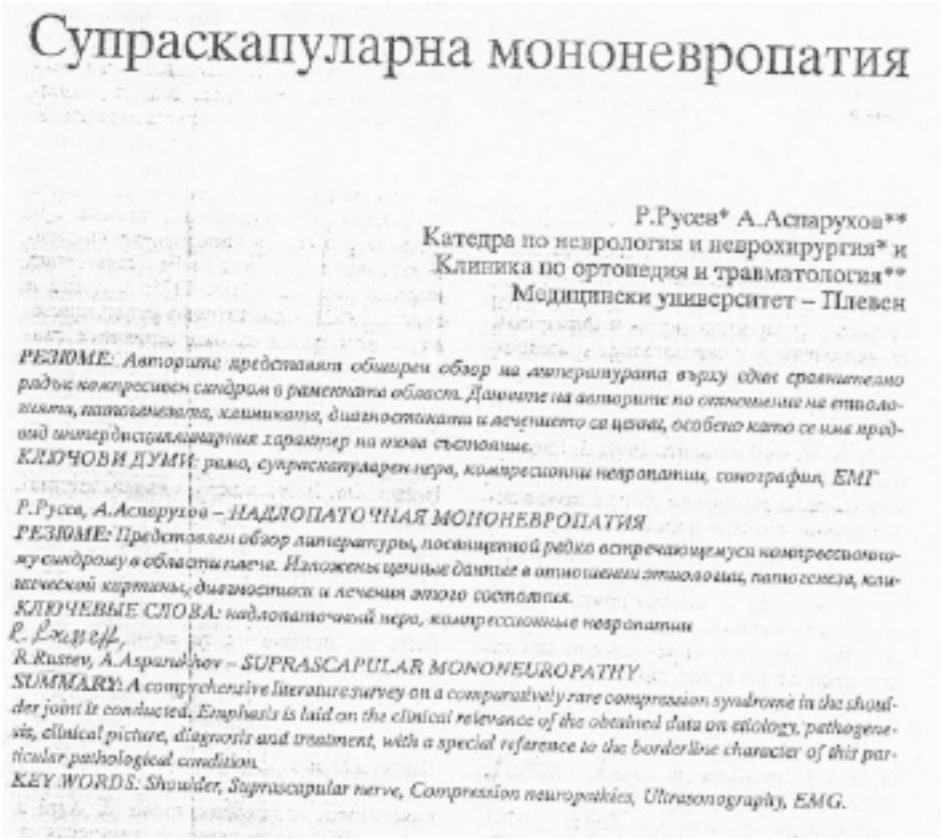

Супраскапуларна мононевропатия

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РЕЗЮМЕ: *Авторите представят обширен обзор на литературата върху един сравнително рядък компресивен синдром в раменната област. Данните на авторите по отношение на етиологията, патогенезата, клиниката, диагностиката и лечението са ценни, особено като се има предвид интердисциплинарния характер на това състояние.*

КЛЮЧОВИ ДУМИ: *рамо, супраскапуларен нерв, компресионни невропатии, сонография, ЕМГ*

Р.Русев, А.Аспарухов – НАДЛОПАТОЧНАЯ МОНОНЕВРОПАТИЯ

РЕЗЮМЕ: *Представлен обзор литературы, посвященной редко встречающемуся компрессионному синдрому в области плеча. Изложены ценные данные в отношении этиологии, патогенеза, клинической картины, диагностики и лечения этого состояния.*

КЛЮЧЕВЫЕ СЛОВА: *надлопаточной нерв, компрессионные невропатии*

R.Rusev, A.Asparuhov – SUPRASCAPULAR MONONEUROPATHY

SUMMARY: *A comprehensive literature survey on a comparatively rare compression syndrome in the shoulder joint is conducted. Emphasis is laid on the clinical relevance of the obtained data on etiology, pathogenesis, clinical picture, diagnosis and treatment, with a special reference to the borderline character of this particular pathological condition.*

KEY WORDS: *Shoulder, Suprascapular nerve, Compression neuropathies, Ultrasonography, EMG.*

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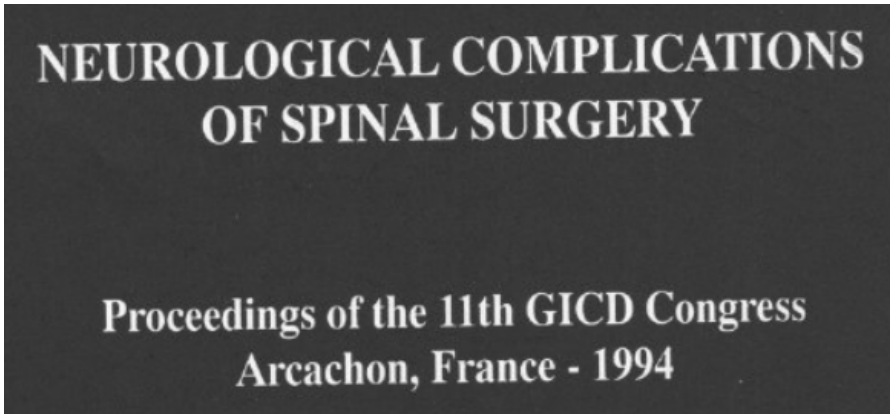

ISCHIALGIA AFTER POSTERIOR LUMBOSACRAL INSTRUMENTATION

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Introduction

In our experience, there are four main reasons for neurologic complications after posterior instrumentation of the spinal column.

1 - The first one is direct contact between metal and the neural structures (147).
2 - The second is inflammation involving neural structures (234).
3 - The third one is post-operative bone hypertrophy and compression of neural structures (81).
4 - And the last, the fourth one is ischaemic damage of the spinal cord and the roots during or following the act of reduction (108).

In all these cases, the increased volume of an intraspinal component (metal, bone, soft tissues) and ischaemic changes, exceeding the tolerance limits of neural structures, are the principal causes of neurologic compromise.

Materials

The following report includes two cases of post-operative sciatica caused by iatrogenic root lesion.

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Our experience with anaesthesia for paediatric electromyography

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SUMMARY

In order to test a "heavy sedation" regimen of anaesthesia for the purpose of paediatric electromyography we applied low-dose oral ketamine + diazepam or midazolam in 110 children aged 0–13 years, median 6, ASA I–II. Eleven children received additional halothane by face mask. A state of "heavy sedation" was achieved 20–25 minutes after medication, abolishing pain but preserving some amount of voluntary movement sufficient for motor unit analysis. No complications were observed except for vomiting in one case. The regimen described provides a safe and effective way of anaesthesia in pediatric electromyography.

4. Аспарухов А, Фанди Г, **Русев РТ**, Вълешков Й. Приложение на ехографията при определяне индикациите за ендоскопска декомпресия на карпалния канал. Диагностичен и терапевтичен ултразвук, 1996, 4, 74-80

ПРИЛОЖЕНИЕ НА ЕХОГРАФИЯТА ПРИ ОПРЕДЕЛЯНЕ ИНДИКАЦИИТЕ ЗА ЕНДОСКОПСКА ДЕКОМПРЕСИЯ НА КАРПАЛНИЯ ТУНЕЛ

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APPLICATION OF ULTRASONOGRAPHY IN DETERMINATION OF INDICATIONS FOR ENDOSCOPIC DECOMPRESSION OF THE CARPAL TUNNEL

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Резюме

Целта на това съобщение е да се представи за първи път у нас техниката на ендоскопска декомпресия на карпалния тунел (ЕДКТ) и се посочат възможностите на ехографията за откриване на обемни процеси в зоната на тунела, респ. в определянето на индикациите и контраиндикациите за ЕДКТ.

При 71 пациенти с клиника на синдрома на карпалния тунел (СКТ) бе извършено динамично ултразвуково сканиране на карпалния тунел с линеен трансдюсер 5 и 7,5 MHz рутинно в две проекции - надлъжна и напречна на канала.

Ехографски промени бяха установени в 17 % от изследваните. Причина за компресията на средния нерв в канала в два случая бе раздута улнарна бурса от дегенеративен артрит на карпалната става, воларно разположен синовиален ганглион в един случай и теносиновит на сгъвните сухожилия от ревматоиден артрит при други двама. В 7 ръце (5 болни) локално отложеният амилоид поради хронична бъбречна недостатъчност (ХБН) се представи с хиперехогенност на уплътнените и задебелени синовиални влагалища, предмишнична фасция и карпалния лигамент.

Ултразвуковото сканиране на карпалния тунел при клинични прояви за СКТ е незаменимо образно средство за диагностика на обемни процеси в или по съседство на тунела. Рутинното ултразвуково изследване на канала при тези пациенти е препоръчително за изясняване етиологията на СКТ и определяне вида на оперативната декомпресия - открита или ендоскопска.

Ключови думи

Ендоскопска декомпресия; Синдром на карпалния тунел (СКТ); Ултразвук.

Abstract

The purpose of the study is to present for the first time in Bulgaria the endoscopic decompression of the carpal tunnel (EDCT) technique. The possibilities of ultrasonography for discovery of volumetric processes in the tunnel area for determination of the indications and contraindications for EDCT are shown.

A dynamic ultrasound scanning with a linear probe 5 and 7,5 MHz was performed in 71 patients with clinical signs for carpal tunnel syndrome (CTS)

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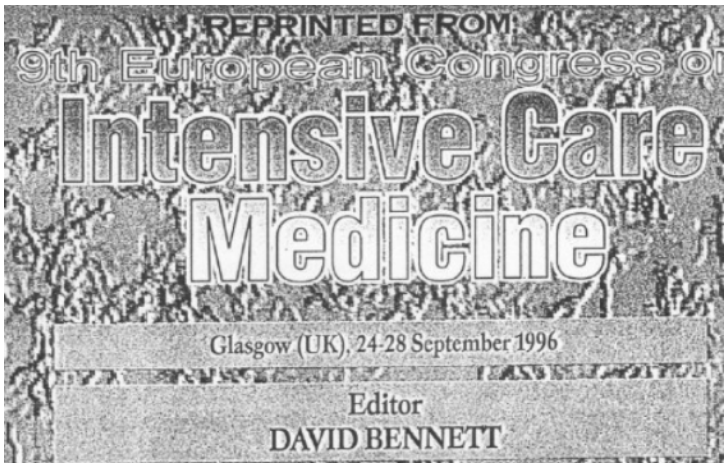

Propofol as a day-case anesthetic in patients with history of epilepsy

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SUMMARY

Propofol up to 2 mg/kg i.v. was used as a day-case anesthetic for interruption of pregnancy in 13 women with history of primarily or secundarily generalized epilepsy. EEG was visually assessed immediately before and after intervention. Midazolam 5 mg i.m. was administered in 7 patients 30 min before surgery. We did not observe any seizures or seizure equivalents; on EEG epileptiform activity when present remained unchanged. We conclude that Propofol with/without benzodiazepine premedication can be used safely in patients with epileptic history.

6. Bojinov St, Tchakarov D, **Rousseff R**, Popovska S, Boneva N. Intractable status epilepticus – analysis of 7 cases. Scientific Works of the Medical University of Pleven, 1997, 17, 1, 58-61

INTRACTABLE STATUS EPILEPTICUS - ANALYSIS OF SEVEN CASES

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ABSTRACT. We report 7 patients (age 17-45 years) with intractable status epilepticus. Etiology was unclear in 4 patients, 2 persons had posttraumatic epilepsy, and in 1 patient alcoholic encephalopathy was the suspected cause. Generalised convulsive status epilepticus lasted from 10-15 to 35 days in one case. Treatment with intravenous diazepam or clonazepam, intramuscular phenobarbital, valproate and carbamazepine via a nasogastric

tube proved ineffective in spite of the maximal doses used. All patients were given intravenous thiopental anaesthesia (up to 200 mg/hour, depending on the to seizure severity), while other medications were continued. In 1 patient, resistant to anaesthesia, intravenous lidocaine up to 100 mg in a bolus and propofol in continuous infusion up to 10 mg/min were administered, but the effect was short-lasting.

KEY WORDS: status epilepticus, anticonvulsant therapy

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Scripta Scientifica Medica, vol. 29, Suppl. 4 (1997), pp. 31-33

ELECTROENCEPHALOGRAM AND VISUAL EVOKED POTENTIAL CHANGES IN ALCOHOLIC PATIENTS WITH EPILEPSY

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We compare the clinical, EEG and VEP findings in 30 alcoholic patients with secondary epilepsy to those in age-matched group of 30 alcoholics without epilepsy. Pyramidal signs were present in 24 patients with epilepsy versus none of the controls ($p < 0,001$). EEG disclosed low-voltage disorganized activity without focal or paroxysmal changes in 24 patients of the epileptic group and in all cases in the non-epileptic one ($p > 0,5$). Paroxysmal focus was present in 6 patients of the epileptic group. VEP were abnormal in 22 patients with epilepsy versus none in the non-epileptic group ($p < 0,001$). Prolonged P100 latencies, abnormal interside differences in latency and amplitudes were found.

Key-words: Alcoholism, epilepsy, EEG, visual evoked potentials

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ПОЛИНЕВРОПАТИЯ НА ТЕЖКО БОЛНИЯ (CRITICAL ILLNESS POLYNEUROPATHY) – ОПИСАНИЕ НА СЛУЧАЙ И ПРЕГЛЕД НА ЛИТЕРАТУРАТА

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Резюме. При пациенти в животозастрашаващи състояния, наложили интензивно лечение, в редки случаи се развива остра полиневропатия, чиято етиология е неясна и не се свързва с основното заболяване, нито с инфекциозни, недоимъчни или токсични въздействия. Засягат се предимно или само моторните влакна, и то по аксонален тип. Тази т. нар. полиневропатия на тежко болния (critical illness polyneuropathy – CIP) може да бъде тежка до степен да наложи продължителна изкуствена вентилация. Тя трябва да се подозира при всеки болен, който по необясними причини не може да възстанови ефективно спонтанно дишане. При появила се в „критичния период" периферна квадрипареза следва да се прибегне до електродиагностично изследване, лумбална пункция, мускулноспецифични ензими и нервно-мускулна биопсия за изключване синдром на Guilain–Barre, остра миопатия или персистиращ недеполяризиращ нервно-мускулен блок. Лечението е симптоматично. Ние предлагаме описание на типичен случай на CIP с електродиагностична и биопсична находка, както и подробен обзор на литературата.

R. Roussev, I. Valkov, P. Tzvetanov, V. Platikanov, V. Tzvetkov and S. Marinova. CRITICAL ILLNESS POLYNEUROPATHY – A PATIENT CASE AND REVIEW OF THE PUBLICATIONS ON THE SUBJECT

Summary. Critically ill patients subject to intensive care may develop acute polyneuropathy of unknown origin. It cannot be related to underlying disease, neither to infection, toxic or deficiency causes. Nerve damage is of axonal type. Motor fibres are predominantly or exclusively affected. This is the so called „critical illness polyneuropathy" which may be severe enough to result in quadriplegia and long-lasting respirator dependence. The syndrome should be suspected in every case of otherwise unexplained difficulties with weaning from artificaial ventilation. Diagnosis is established by EMG, CSF investigation, muscle-specific serum enzymes and nerve/muscle biopsy. These serve to exclude acute demyelinating neuropathy, acute necrotizing myopathy or persistent non-depolarising block. Treatment is supportive. We report on a typical biopsy – and EMG–proven case and review the literature on the subject.

Key words: polyneuritis/therapy; quadriplegia

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СЛУЧАЙ НА ЛИМФОЦИТЕН ХОРИОМЕНИНГИТ С НЕОБИЧАЕН ОГНИЩЕН НЕВРОЛОГИЧЕН СИНДРОМ

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2. НЦЗПБ

Ключови думи: лимфоцитен хориоменингит, вирус на лимфоцитния хориоменингит

CASE OF THE LYMPHOCYTIC HORIOMENINGITIS WITH UNCOMMON FOCUS NEUROLOGIC SYNDROME - INFECTOLOGY, XXXV, 1998, 3, 44-45
V. Marinova, M. Popova, R. Rusev, G. Katzarov, S. Nikolaeva

Observation of 14-years old girl with lymphocytic horiomeningitis with uncommon focus neurologic syndrome was carried out. This syndrome is a combination of light, fastransient syndroms, typical for the injurance of central effector neuron and persisting for more than 3 months peripheral glossoparesis with heavily hypotrophy of the left half of the tongue. Till the moment, form with similar clinical count wasn't found in the medical literature. Liquoric and virologic analysis and neurography were used and the results were confirmed with electromyography. The illness was categorized like meningo-encephalitis form of lymphocytic horiomeningitis.

СЛУЧАЙ НА ЛИМФОЦИТЕН ХОРИОМЕНИНГИТ С НЕОБИЧАЕН ОГНИЩЕН НЕВРОЛОГИЧЕН СИНДРОМ - ИНФЕКТОЛОГИЯ, XXXV, 1998, 3, 44-45
В. Маринова, М. Попова, Р. Русев, Г. Кацаров, С. Николаева

Проведено е наблюдение на 14-годишно момиче с лимфоцитен хориоменингит с необичаен огнищен синдром. Той е съчетание на леки, бързопреходни симптоми, характерни за увреждането на централния двигателен неврон и персистирала повече от три месеца периферна глосопареза, с тежка хипотрофия на лявата езикова половина. Форма с подобна клинична картина досега не е открита в медицинската литература. Използвани са ликворно и вирусологично изследване и невроография, а резултатите са потвърдени чрез електромиография. Заболяването се категоризира като менинго-енцефалитна форма на лимфоцитен хориоменингит.

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Годишен сборник ИМАБ том 4, 1998; Annual proceedings IMAB Volume 4

ГЛАВОБОЛИЕ В НАЧАЛНИЯ ПЕРИОД НА ИСХЕМИЧНИЯ МОЗЪЧЕН ИНСУЛТ

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HEADACHE AT THE ONSET OF ISCHAEMIC STROKE

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ABSTRACT

We report on the clinical features of headache at the onset of ischemic stroke (12 hrs before - 12 hrs after the onset of neurologic deficit) in 120 patients (104 carotid, 16 vertebrobasilar stroke, mean age 63.5, (42-81), 53 women. Patients were able to communicate. Headache was reported by 39 of them (32.5%, CI 24.1% - 40.9% at P=0.95), vertebrobasilar stroke in 7. Headache was diffuse or widespread in most patients. In individual cases only was the pain localised in zones considered typical for affliction of particular vessels. Size of the infarct, brain oedema, midline shift, younger age all correlate positively with the presence of headache. We conclude that headache is frequent in ischemic stroke. Its presence correlates with stroke severity. Headache, however, has no localiz ing value, except for the rare cases of „typical" pain in involvement of large carotid or vertebrobasilar vessels.

Key words: headache, stroke, brain infarct

11. **Русев Р**, Пл Цветанов, Д Чакъров. Стрес-изследване на соматосензорни евокирани потенциали при стимулация на N. medianus – резултати при болни с множествена склероза. Годишен Сборник “Научни трудове на ИМАБ” 1998, 4, 1, 47-49.

STRESS-INVESTIGATION OF MEDIANUS-SEP IN MULTIPLE SCLEROSIS WITH CERVICAL CORD INVOLVEMENT

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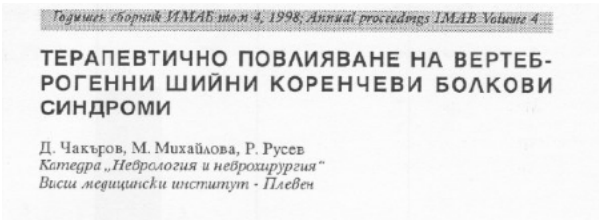
ABSTRACT

Objective. To investigate, whether Medianus-SEP parameters change with postural stress. Patients and methods. Twelve patients with multiple sclerosis (median age 28.7, 20-40 yrs) with clinical and MRI evidence of a cervical plaque. Medianus-SEP recorded in neutral neck posture and at 1-st, 2-nd up to 10-th minutes after maximal flexion, extension, ipsi-and contralateral rotation in the neck. The absolute latency of N 19 peak and amplitude of N19P22 complex in % of the initial are assessed. Results are compared with normative values in 15 healthy persons (30 nerves) studied in the same way. Results. Significant change of Medianus-SEP with postural stress was observed in only one patient (amplitude decrease, only with flexion). Conclusions. Non-compressive spinal lesions do not lead to significant change of Medianus-SEP with postural stress. In this aspect they differ from cord compression, which is accompanied by stress-SEP changes. This difference may have diagnostic value in delineating compressive from non-compressive lesions.

12.Чакъров Д, Михайлова М, Русев Р. Терапевтично повлияване на вертеброгенни шийни коренчеви болкови синдроми. Годишен Сборник “Научни трудове на ИМАБ” 1998, 4, 2, 257-260.



Годишен сборник ИМАБ том 4, 1998; Annual proceedings IMAB Volume 4

ТЕРАПЕВТИЧНО ПОВЛИЯВАНЕ НА ВЕРТЕБРОГЕННИ ШИЙНИ КОРЕНЧЕВИ БОЛКОВИ СИНДРОМИ

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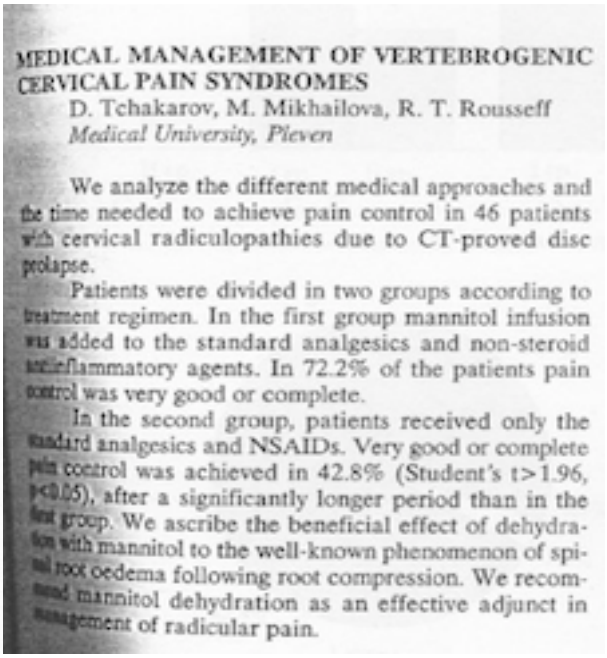

MEDICAL MANAGEMENT OF VERTEBROGENIC CERVICAL PAIN SYNDROMES

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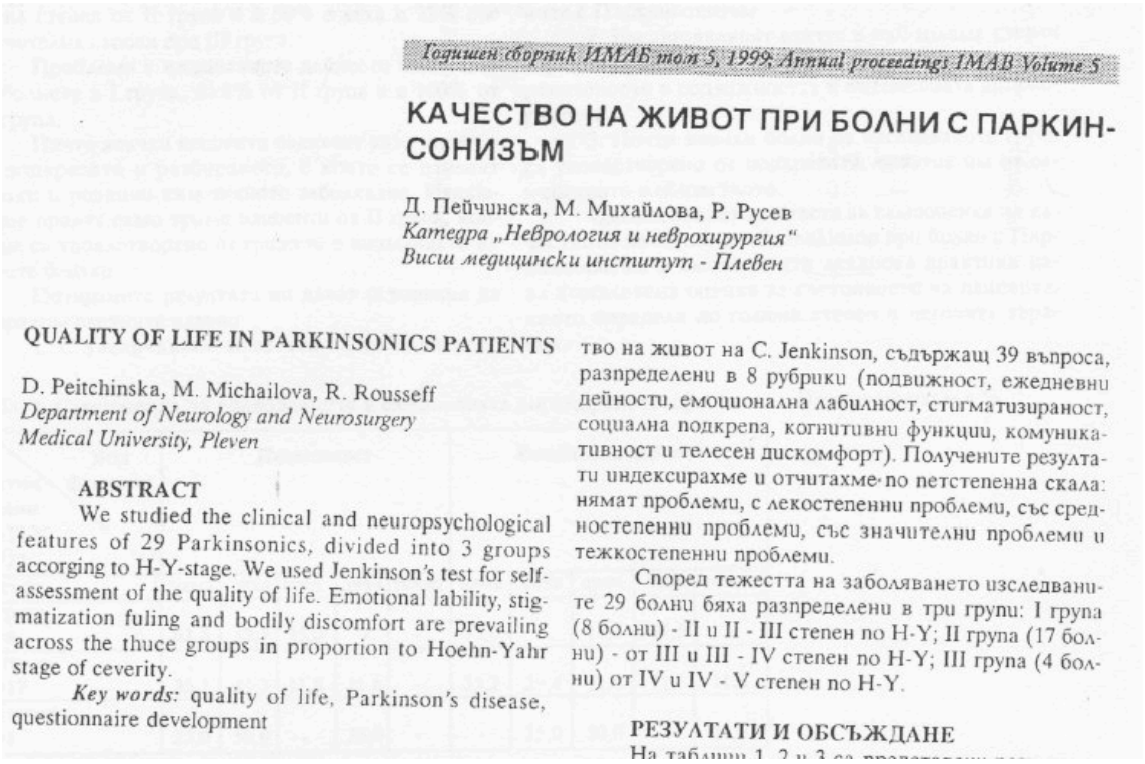
We analyze the different medical approaches and the time needed to achieve pain control in 46 patients with cervical radiculopathies due to CT-proved disc prolapse.

Patients were divided in two groups according to treatment regimen. In the first group mannitol infusion was added to the standard analgesics and non-steroid anti-inflammatory agents. In 72.2% of the patients pain control was very good or complete.

In the second group, patients received only the standard analgesics and NSAIDs. Very good or complete pain control was achieved in 42.8% (Student's $t>1.96$, $p<0.05$), after a significantly longer period than in the first group. We ascribe the beneficial effect of dehydration with mannitol to the well-known phenomenon of spinal root oedema following root compression. We recommend mannitol dehydration as an effective adjunct in management of radicular pain.

13.Пейчинска Д, Михайлова М, Русев Р. Качество на живот при болни с паркинсонизъм. Годишен Сборник “Научни трудове на ИМАБ” 1998, 4, 2, 218-220. 1310-7232 (print)



Годишен сборник ИМАБ том 5, 1999; Annual proceedings IMAB Volume 5

КАЧЕСТВО НА ЖИВОТ ПРИ БОЛНИ С ПАРКИНСОНИЗЪМ

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QUALITY OF LIFE IN PARKINSONICS PATIENTS

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ABSTRACT

We studied the clinical and neuropsychological features of 29 Parkinsonics, divided into 3 groups accorging to H-Y-stage. We used Jenkinson's test for self-assessment of the quality of life. Emotional lability, stigmatization fuling and bodily discomfort are prevailing across the thuce groups in proportion to Hoehn-Yahr stage of ceverity.

Key words: quality of life, Parkinson's disease, questionnaire development

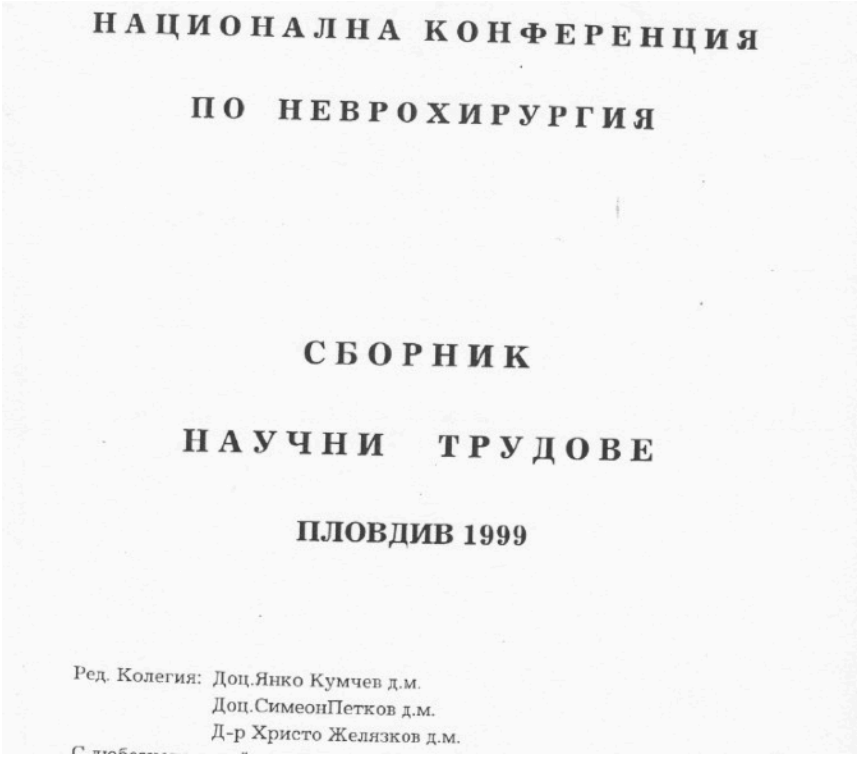
тво на живот на C. Jenkinson, съдържащ 39 въпроса, разпределени в 8 рубрики (подвижност, ежедневни дейности, емоционална лабилност, стигматизираност, социална подкрепа, когнитивни функции, комуникативност и телесен дискомфорт). Получените резултати индексирахме и отчитахме по петстепенна скала: нямат проблеми, с лекостепенни проблеми, със средностепенни проблеми, със значителни проблеми и тежкостепенни проблеми.

Според тежестта на заболяването изследваните 29 болни бяха разпределени в три групи: I група (8 болни) - II и II - III степен по H-Y; II група (17 болни) - от III и III - IV степен по H-Y; III група (4 болни) от IV и IV - V степен по H-Y.

РЕЗУЛТАТИ И ОБСЪЖДАНЕ

На таблици 1, 2 и 3 са представени

14.Вълков Ил, Н Бонева, Р Русев, Хр Ковачев, Ф Филипов, Т Шамов. Функционалните оплаквания след мозъчно сътресение – без връзка с промени в соматосензорния П300 потенциал. Сборник Научни Трудове „Национална Конференция по Неврохирургия 1999“, Пловдив, ред. Кумчев, Петков, Желязков, стр. 170-172.



НАЦИОНАЛНА КОНФЕРЕНЦИЯ

ПО НЕВРОХИРУРГИЯ

СБОРНИК

НАУЧНИ ТРУДОВЕ

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СОМАТОСЕНЗОРНИЯ ФУНКЦИОНАЛНИТЕ ОПЛАКВАНИЯ СЛЕД МОЗЪЧНО СЪТРЕСЕНИЕ - БЕЗ ВРЪЗКА С ПРОМЕНИ В P300 ПОТЕНЦИАЛ

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РЕЗЮМЕ

Изследван е соматосензорен P300 потенциал при 10 болни с функционални оплаквания след комоцио, които обаче нямат трайността и тежестта на травмена церебрастетия. Резултатите са сравнени с тези на 15 пациенти, преживели мозъчно сътресение, при които не са се явили подобни оплаквания, и на контролна група от 30 здрави лица. Пациентите са на възраст до 45 години, от изследването са изключени хронични алкохолици и болни със сериозни соматични увреди. Промени на P300 не се установяват и в двете изследвани групи.

15.Ив. Миланов, Р. Русев. Първичен ортостатичен тремор. Мозъчносъдови заболявания, 2001, 9, 1, 46-50. 0861-9972 (print)

ПЪРВИЧЕН ОРТОСТАТИЧЕН ТРЕМОР

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Summary

PRIMARY ORTHOSTATIC TREMOR

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Primary orthostatic tremor is a rare disorder of unknown etiology, requiring specific treatment. We present four patients who developed the typical high frequency (13 - 16 Hz) tremor of the lower limbs. The tremor appeared only in standing upright and resolved with sitting, lying or fast walking. The disorder was severe enough to cause falls and to impede every day activities. On electromyographic examination, regular synchronous bursts were recorded from the antagonist muscles of the lower limbs and the paraspinal muscles. In one patient a 7 Hz synchronous postural tremor presented in the antagonists of the forearms, that shifted in frequency of 13 Hz on weight-bearing ("push-up" like posture). Primidone 325 mg daily and Clonazepam 2 mg daily was effective treatment.

Key Words:

ELECTROMYOGRAPHY, ORTHOSTATIC TREMOR

Ключови думи: **ЕЛЕКТРОМИОГРАФИЯ, ОРТОСТАТИЧЕН ТРЕМОР**

Съкратено заглавие:

Ортостатичен тремор

Въведение

През 1984 г. K. M. Heilman (8) описва особен тип тремор наречен от него "ортостатичен тремор". Той се появява само в изправено положение, обхваща мускулите на долните крайници и се дължи на едновременна контракция на мускулите антагонисти (7). Наименованието се налага с допълнението "първичен". Предложеното по-късно наименование синдром на треперещите крака не добива разпространение (19).

В следващите години и други автори обръщат внимание на особените черти на това двигателно нарушение, които рязко го отличават от останалите видове тремор (11). Въпреки, че при някои болни се намира и постурален тремор на Минор в горните крайници, както и фамилни и с двата вида тремор, при ортостатичния тремор обикновено не се установява фамилност, той не се повлиява от алкохол и бета-блокери и се получава само при изправяне и изчезва при ходене. Заболяването е изключително рядко и повечето съобщения са върху отделни случаи.