

Psychological aspects of depression and aggression in patients with consequences of spinal cord injury

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DESIGN

Cross-section mono central cohort (n=51)

Period of patients enrollment- 2016 – 2018

♂ - 43 (84.3 %) ♀ - 8 (15.7%)

Age: 18 - 58 y.o. (35,7±8,7)

Disease duration 7 - 240 months (66,9±3,8 months)

INCLUSION CRITERIA:

- Patients with spine injuries and clinical symptoms of spinal cord injury (SCI)
- Age >18 y.o.
- Over 4 months after trauma

EXCLUSION CRITERIA:

- Patients with spine injuries without clinical signs of SCI
- Age < 18 y.o.
- Less than 4 months after trauma

METHODS:

Clinical check-up, psychological testing, Statistic analysis (Microsoft Office Excel, 2016)

EVALUATION PARAMETERS

Type of injury ASIA, Beck Depression Inventory (BDI), Spielberger-Khanin Anxiety Scale, Buss - Durkee Hostility Inventory (BDHI), $M \pm m$, r-Pearson, t-Student

ETHICAL REVIEW

The study was performed in compliance with the principles of the Helsinki Declaration of 1957 (and as revised in 1983)



RESULTS

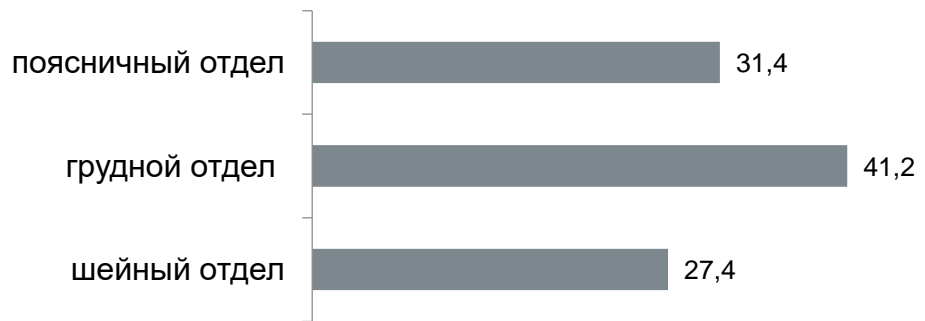


Diagram on distribution according to level of SCI

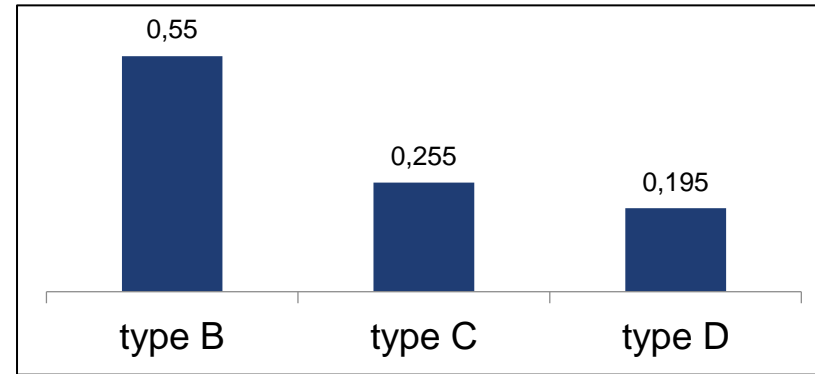
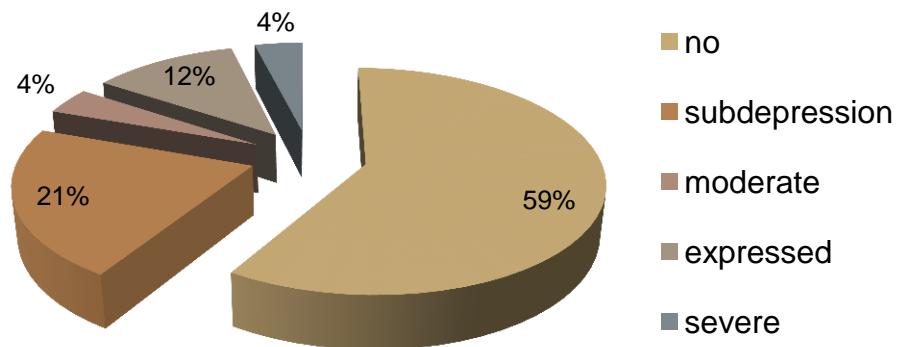
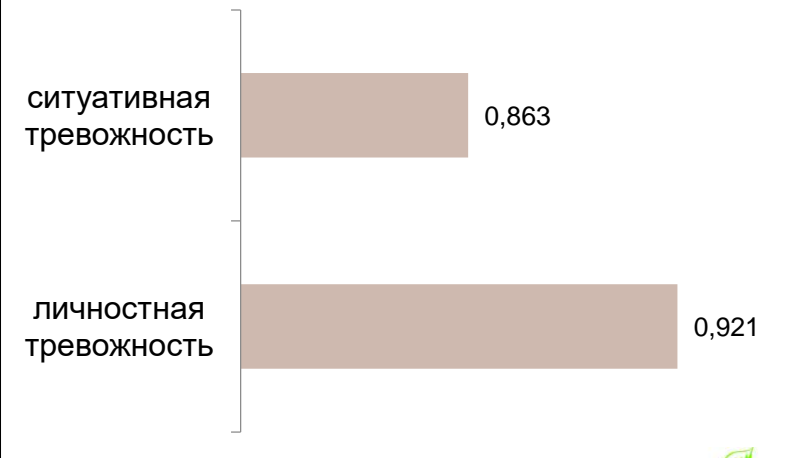


Diagram on distribution according to ASIA scale



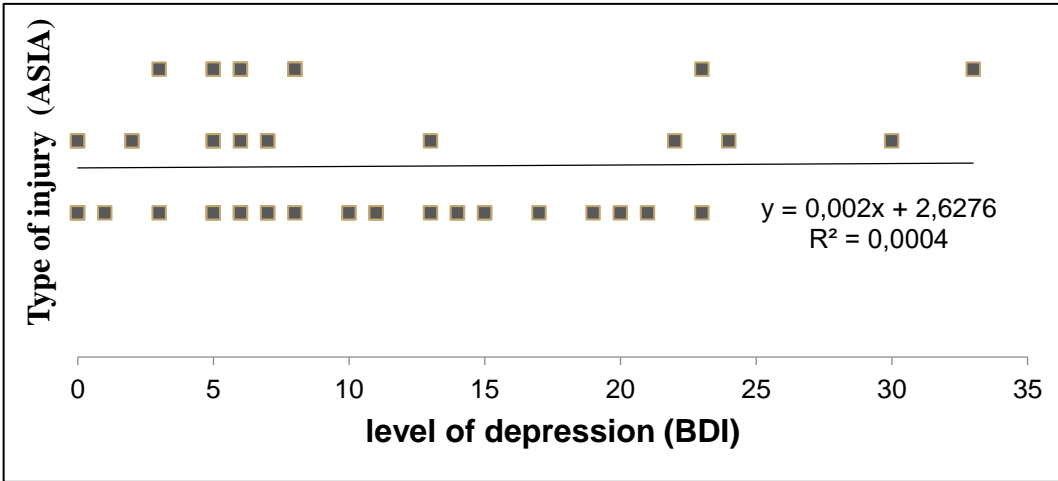
Distribution on depression intensity according to BDI



Anxiety diagram according to Spielberger-Khanin Anxiety Scale

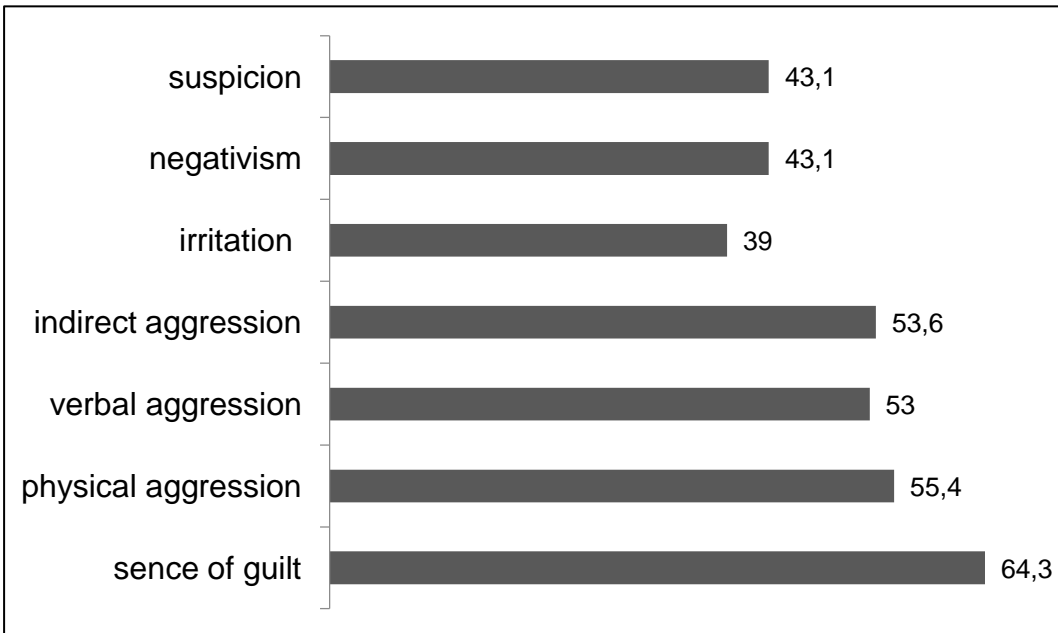
- Clinical depression symptoms were diagnosed in **10 patients (19,6%)**
- Mean number of BDI **10,0±6,1**

RESULTS



Correlation dependence between level of depression and type of SCI was not revealed

Correlation of depression level and type of neurologic disorder



Agression index **53,5±15,2**
(average statutory value)

Hostility index **44,5±14,1**
(average statutory value)

Distribution of average meanings according to BDHI

RESULTS

BDI results:

- 30 patients –no symptoms of depression (BDI<10)
- 21 patients — depression from mild to expressed degree (BDI≥10)

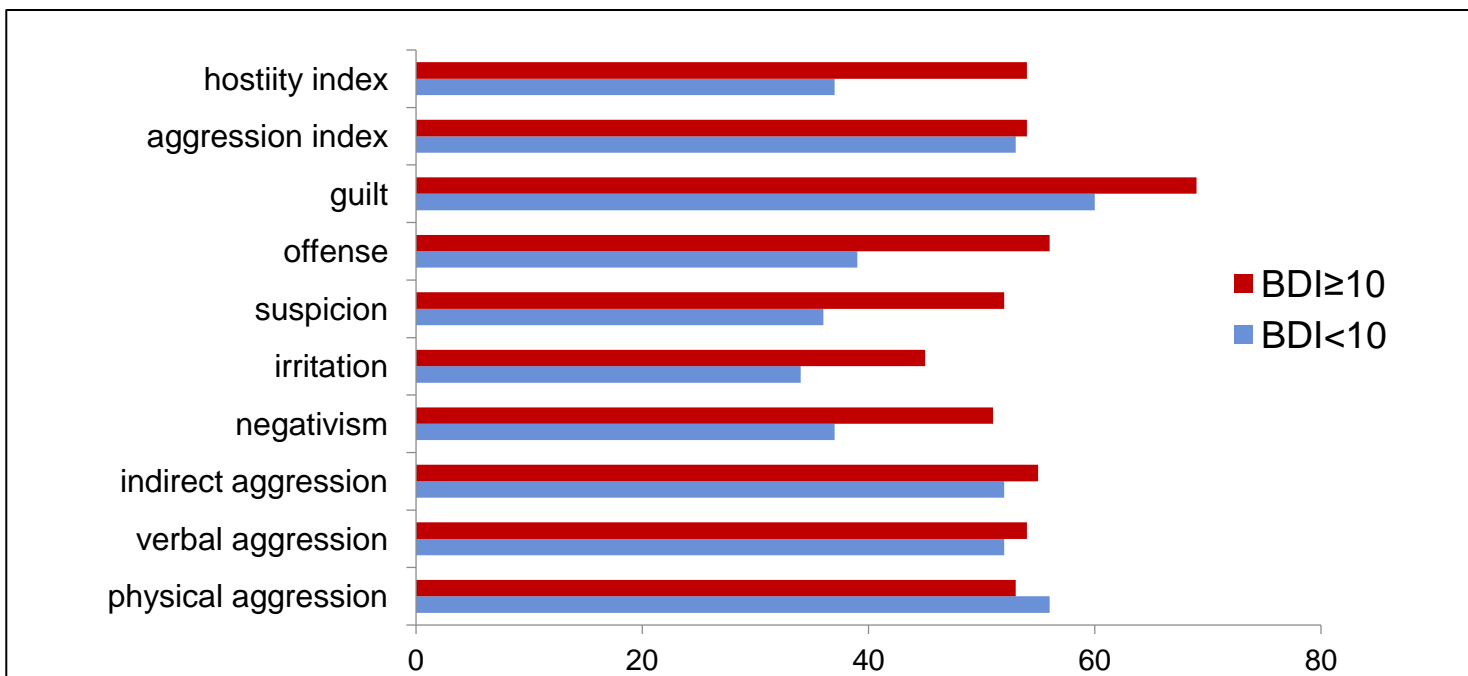


Diagram of aggressiveness scale according to BDHI (BDI) ($p < 0,05$)

In patients with BDI ≥ 10 revealed correlation:

level of depression — type of neurological disorder (ASIA): $r = 0,7$

level of depression — pelvic organs disorder: $r = 0,6$

Literature data regarding depression frequency in patients, in long term follow up after SCI are contradictory

NeuroRehabilitation 29 (2011) 9–21
DOI 10.3233/NRE-2011-0672
IOS Press

1 y. after SCI

Factors predicting depression among persons with spinal cord injury 1 to 5 years post injury

11%

Juan Carlos Arango-Lasprilla^{a*}, Jessica M. Ketchum^b, Angela Starkweather^c, Elizabeth Nicholls^a and Amber R. Wilk^b



Archives of Physical Medicine and Rehabilitation
Volume 92, Issue 3, March 2011, Pages 411-418

18%

Original article

A Longitudinal Study of Depression From 1 to 5 Years After Spinal Cord Injury

Jeanne M. Hoffman PhD ^a, Charles H. Bombardier PhD ^a, Daniel E. Graves PhD ^b, Claire Z. Kalpakjian PhD, MS ^c, James S. Krause PhD ^d

Authors: James S Krause

Publication Detail: Type: Comparative Study; Journal Article; Research Support

Journal Detail: Title: Archives of physical medicine and rehabilitation Med Rehabil Publication Date: 2010 Nov

Date Detail: Created Date: 2010-11-03 Completed Date: 2010-12-16 Revised Date: 2014-01-16

24%

3 y. after SCI

OPEN ACCESS PEER-REVIEWED

RESEARCH ARTICLE

Anxiety and Depression in Patients with Traumatic Spinal Cord Injury: A Nationwide Population-Based Cohort Study

8,8%

Sher-Wei Lim, Yow-Ling Shiue, Chung-Han Ho, Shou-Chun Yu, Pei-Hsin Kao, Jhi-Joung Wang, Jinn-Rung Kuo

Published: January 12, 2017 • <https://doi.org/10.1371/journal.pone.0169623>

Present study

5,5 y. after SCI - 19,6%

NeuroRehabilitation 29 (2011) 9–21
DOI 10.3233/NRE-2011-0672
IOS Press

5 y. after SCI

Factors predicting depression among persons with spinal cord injury 1 to 5 years post injury

9,7%

Juan Carlos Arango-Lasprilla^{a*}, Jessica M. Ketchum^b, Angela Starkweather^c, Elizabeth Nicholls^a and Amber R. Wilk^b

^aDepartment of Physical Medicine and Rehabilitation, Virginia Commonwealth University, Richmond, VA, USA
Spinal Cord. 1997 Aug;35(8):516-20.

Psychological investigation of spinal cord injury patients

16%

Scivoletto G¹, Petrelli A, Di Lucente L, Castellano V.



Archives of Physical Medicine and Rehabilitation
Volume 92, Issue 3, March 2011, Pages 411-418



21%

Original article

A Longitudinal Study of Depression From 1 to 5 Years After Spinal Cord Injury

Jeanne M. Hoffman PhD ^a, Charles H. Bombardier PhD ^a, Daniel E. Graves PhD ^b, Claire Z. Kalpakjian PhD, MS ^c, James S. Krause PhD ^d

16,6±10,6 y. after SCI

Rehabilitation Psychology
2017, Vol. 62, No. 2, 178–185

0090-5550/17/\$12.00 <http://dx.doi.org/10.1037/0090-5550.62.2.178>

Posttraumatic Stress Disorder After Spinal Cord Injury

22%

Yue Cao, Chao Li, Susan Newman, and Jasmine Lucas
Medical University of South Carolina

Susan Charlifue
Craig Hospital, Englewood, Colorado

James S. Krause
Medical University of South Carolina

Results variances is explained by different types of diagnostic testings: clinical interview, BDI, QD, DSM, OAHMQ etc., that are not always specific for certain clinical situation and incomparable with each other.

Anxiety level in patients in long term after SCI



Archives of Physical Medicine and Rehabilitation

Volume 81, Issue 7, July 2000

Articles

Anxiety and depression after spinal cord injury ☆☆☆

Paul Kennedy DPhil, Ben A. Rogers BSc

Prospective study 104 patients (BDI): significant correlation between anxiety and depression

Higher level of anxiety during first 3 years after SCI

Present study:
Trait anxiety - **92,1%**
State anxiety - **86,3%**



RESEARCH ARTICLE

Anxiety and Depression in Patients with Traumatic Spinal Cord Injury: A Nationwide Population-Based Cohort Study

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Shen-Wai Liao^{1,2,3,4}, Yow-Ling Shiao⁵, Chung-Han Ho^{6,7}, Shou-Chun Yu⁸, Pei-Hsin Kao⁹, Jhi-Joung Wang¹⁰, Jinn-Rung Kuo^{11,12}

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Abstract

Background

Traumatic spinal cord injury (SCI) may involve new-onset anxiety and depression. However, long-term population-based studies have lacked access to follow-up conditions in terms of new-onset anxiety and depression. The objective of this study was to estimate the long-term risk of new-onset anxiety and depression post-discharge.

Methods

The Longitudinal Health Insurance Database 2000 (LHID2000) from Taiwan's National Health Insurance Research Database was used in this study. Individuals with SCI were identified using the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) diagnostic codes of 800 and 800 from 1989–2008. The combination

Contributory causes of depression in SCI

Neurologic disorders, Bowel and bladder disfunction, Pain syndrome, Limb muscle spasticity, Infection, Patients without treatment, Males

Present study:
In patients with depression was revealed significant dependency of its level from severity of neurologic deficit and pelvic organs disfunction

ORIGINAL ARTICLE

Psychological morbidity and spinal cord injury: a system

A Craig, Y Tan and J Middleton
Rehabilitation Studies Unit, Northern Clinical School, Faculty of Medicine, University of Sydney, Sydney, New South Wales, Australia

Краткое сообщение
Психологическая траектория пациента с последствием позвоночно-спинномозговой травмы

Aging with a Disability: What the Clinician Needs to Know

Bryan J. Kemp, Laura Motaque
JHU Press, 8 июл. 2012 г. - Всего страниц: 328



With advances in medical care, technology, and rehabilitation, people have shown, however, that the changes and problems associated with without disabilities. These changes pose significant challenges for he are aware of these findings.

DISCUSSION

High figures on hostility index was diagnosed in 11,7% cases

- Indirect aggression
- «sense of guilt»

High rates of aggression in patients with depression (BDI \geq 10)

- irritation
- offence
- negativism
- suspicion

Consolidated figure of external aggression is lower than consolidated hostility index

Patients after SCI are not aggressive but to a certain extend hostile

Psychological rehabition course

- Reduce of feeling of hostility and suspicion
- Neutrolize tendency to self-destructive behaviour and isolation
- Practice skills and ways of constructive reaction at aggressive impulses
- Develop skills of effective coordination
- Training of goal-settings



Disclosure

The authors state that there is no conflict of interest

The study was conducted without financial support from sponsors

