

Vol 7 Issue 3 Dec 2017

ISSN No : 2249-894X

*Monthly Multidisciplinary
Research Journal*

*Review Of
Research Journal*

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THE NEUROPSYCHOLOGICAL EVALUATION IN PATIENTS WITH ANEURYSMS: A PROTOCOL OF TESTS IN NEUROSURGERY

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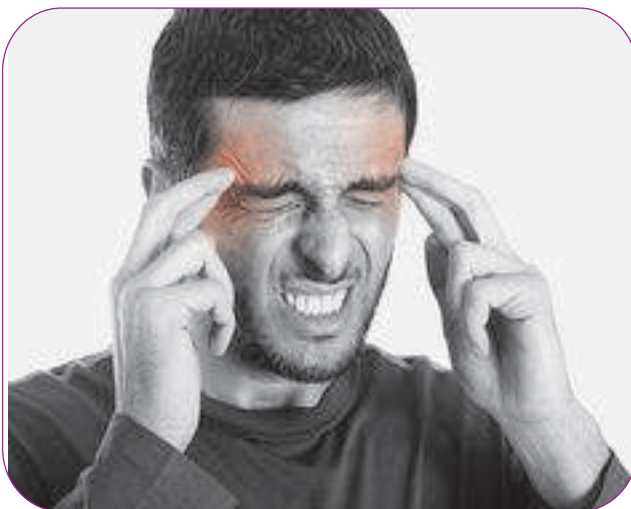
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ABSTRACT:-

The intracranial aneurysms come from a fragility of a blood vessel, a kind of protuberance, which may be at risk from bleeding. The diagnosis of the lesion before the rupture of the aneurysm becomes important for the treatment proposal. Sometimes, only surgical interventions may be the solution to the problem; in addition, withdrawal can cause serious damage to cognitive functioning and the clinical condition may contribute to the emergence of factors that may affect the individual's psychological and emotional health, such as stress, anxiety and depression. Therefore, evaluations of mental and emotional state in adults and elderly with cerebral aneurysm in the pre-surgical process are of major importance to neuropsychological studies. The methodology used includes systematic reviews and observational studies described in databases such as Lilacs, PubMed and Scielo. The objective of this study was to observe and identify the neuropsychological instruments are used by professionals that evaluate cognitive and emotional aspects in patients with aneurysms, since the impact of aneurysm bleeding in a patient's life should be accurately evaluated, since ruptures can be fatal and it is to the neuropsychological tests that we give credit of the evaluation of the cognitive functions and the emotional state of the individuals.

KEYWORDS: Aneurysms, neuropsychological evaluation, mental state.

SOMMAIRE:-



Les anévrismes intracrâniens proviennent d'une fragilité d'un vaisseau sanguin, une sorte de protubérance, qui peut être à risque de saignement. Le diagnostic de la lésion avant la rupture de l'anévrisme devient important pour la proposition de traitement. Et parfois, seule la chirurgie peut être la solution au problème, en plus du retrait peut causer des dommages graves à la fonction cognitive et l'état clinique peut contribuer à l'émergence de facteurs qui peuvent influencer sur la santé psychologique et émotionnel de l'individu, comme le stress, l'anxiété et la dépression. Par conséquent, les évaluations de l'état mental et émotionnel chez les adultes et les personnes âgées ayant un anévrisme cérébral dans le processus pré-

chirurgical sont d'une importance majeure pour les études neuropsychologiques. La méthodologie utilisée comprend des revues systématiques et des études d'observation décrites dans des bases de données telles que Lilacs, PubMed, Scielo. L'objectif était d'observer et d'identifier que les instruments neuropsychologiques sont utilisés par les professionnels qui évaluent les aspects cognitifs et émotionnels chez les patients ayant des anévrismes, l'impact de saignement d'un anévrisme dans la vie d'un patient doit être évalué avec précision parce que les pauses peuvent être fatale et c'est aux tests neuropsychologiques que nous attribuons l'évaluation des fonctions cognitives et de l'état émotionnel des individus.

Mots clés: Anévrismes, évaluation neuropsychologique, état mental.

INTRODUCTION

Classified in the group of cerebral vascular disorders, intracranial aneurysms are characterized by localized and abnormal dilatation of the artery wall, usually located in the Willis arterial polygon. They may be congenital, traumatic, atherosclerotic, septic stretching, or pocket formation outside the vessel walls. Some risk factors are associated with its onset, such as hypertension, obesity, cardiopathy, diabetes mellitus, smoking, chronic alcoholism and so on. Most signs and symptoms of cerebral aneurysm rupture are the result of acute blood leakage within the subarachnoid space.

Arterial hypertension and constant stress may be causes of aneurysm rupture, which causes increased blood flow, particularly at the bifurcation between the arteries, where it is the most common site of aneurysms, increasing its severity, regardless of the volume of the aneurysm. The prognosis of patients after intracranial aneurysm bleeding is associated with the severity of the initial bleeding, the occurrence of rebleeding and the occurrence of vasospasm. This clinical condition may contribute to the emergence of factors that may affect the individual's psychological and emotional health, such as stress, anxiety and depression, hence the importance of neuropsychological assessments.¹

On the other hand, surgical interventions in cerebral aneurysms are frequent, since there is a need to remove what can cause serious damage to health and cognitive functioning. This factor can affect the mental health, physical and the quality of life of the individual.

The methodology research used the booleans operators and the keywords: "aneurysm", "mental state" and "psychological evaluation". Some of these researches were found articles that report to use the Mini Mental State Examination-MMSE; the Beck Inventory of Anxiety-BAI and the Beck Depression Inventory-BDI; the Inventory of Stress Symptoms for adults, the test Lipp, and others instruments which measure of quality of life was verified the application of the questionnaire Whoqol-Bref (World Health Organization Quality of Life)², an instrument that evaluates the quality of life.

The seeking to verify the implications of the neurosurgical process to patients with aneurysms such as mental and emotional health and their quality of life. Here, the Neuropsychology makes it possible to apprehend such questions through the aforementioned tests.

OBJECTIVES

The purpose of this study was to construct a roadmap for the evaluation of the cognitive and emotional state in adults and elderly people with cerebral aneurysms in the pre-surgical process, verifying which tests are most applies by neuropsychology researchers to evaluate stress, anxiety and depression levels.

Therefore, steps are necessities to perform this objective:

1. Researches on databases for related to the subject aneurysms and cognitive and emotional evaluation in adults and the elderly;
2. Selection of appropriate articles from the studies that may contribute to the proposed theme;
3. Discussion on the most applied neuropsychological tests to assess the mental state in patients with aneurysms;
4. Elaboration of the mental evaluation script in patients with preoperative aneurysms.

METHODOLOGY

The systematic reviews proposed categorization of the most commonly used tests for ease of application, target population, benefits and efficacy in favor of neurosurgical and neuropsychological treatment. It was observed that the clinical practice of these researchers, the most used tests were Mini Mental State Examination (MMSE), Psychological Tests of the Beck Scales (Beck Inventory of Anxiety - BAI and the Beck Inventory (BDI) and Lipp's Adult Stress Symptom Inventory, and the Whoqol-bref (World Health Organization Quality of Life), an instrument that assesses quality of life.

Regarding the studies evaluated, those who performed tests with adults and elderly and excluded, those who investigated children, adolescents and other types of diseases that did not include cranioencephalic aneurysm like as chosen for research. This allowed the refinement of the terms "cerebral aneurysm" and "neuropsychological evaluation" in adult and elderly patients. The intention was to build a protocol that could be provide a better intervention and, who knows, a script that could contribute to increase knowledge in the area of Neuropsychology and collaborate for research on the treatment of aneurysms.

RESULTS AND DISCUSSION

The premise is that, the cerebrovascular diseases are the major cause of death in Brazil and may generate causes sequels, some irreversible, such as physical incapacity and cognitive damage. In this way, it has a huge impact on the economically active population and the cost of treatment. The literature reveals that there is a classification in the group of cerebral vascular disorders and the intracranial aneurysms are characterized by a localized and abnormal dilation in the artery wall, generally located in the Willis arterial polygon. They may be congenital, traumatic, atherosclerotic, septic stretching or pocket formation outside the vessel walls.¹

Risk factors are associated with their onset, such as hypertension, obesity, cardiopathy, diabetes mellitus, smoking, chronic alcoholism, and so on. Most signs and symptoms of cerebral aneurysm rupture are the result of acute blood leakage within the subarachnoid space. Arterial hypertension and constant stress may be causes of aneurysm rupture, which causes increased blood flow, particularly at the bifurcation between the arteries, where it is the most common site of aneurysms, increasing its severity, regardless of the volume of the aneurysm. The prognosis of patients after intracranial aneurysm bleeding is associated with the severity of the initial bleeding, the occurrence of rebleeding and the occurrence of vasospasm. This clinical condition may contribute to the emergence of factors that may affect the individual's psychological and emotional health, such as stress, anxiety and depression.¹

However, the illness comes to affect the environment of the subject and hospitalization is sometimes necessary for a longer period by changing the lifestyle, social relations, physical and psychological health, etc. In this way, the texts researched agree that it becomes important to evaluate their quality of life. Surgical interventions in cerebral aneurysms are frequent as there is a need to remove what can cause serious damage to health and cognitive functioning. This factor can affect the mental health, physical and the quality of life of the individual and the assessments of mental and emotional state in the pre-surgical process are of paramount importance and benefit for the psychological and medical treatment of these patients.

Quality of life

The definition to quality of life is individual perception of our position in life in the cultural context and in value system that our lives are in relation to our objectives, expectations, standards and concerns². As a tool for assessing the quality of WHOQOL (World Health Organization Quality of Life). However, by providing a detailed assessment of the 24 facets that make it up, the WHOQOL can become very extensive for some applications. Thus, the need for a shorter instrument for use in extensive epidemiological studies has to develop the abbreviated version with 26 questions (Whoqol-Bref). The WHOQOL-BREF was used which instrument for this study.²

The WHOQOL-BREF (World Health Organization Quality of Life) instrument consists of 26 questions, two general quality of life issues, while the others represent each of the 24 facets that make up the original instrument. Thus, the WHOQOL - BREF covers the following domains: physical, psychological, social relations

and the environment.²

Responses to the WHOQOL-BREF questions offer on a likert scale. The questions answered through four types of scales (depending on the content of the question): intensity, capacity, frequency and evaluation.

The hospital psychology is the field of understanding and treatment of psychological aspects around the hospitalization process, that is, it gives voice to the subjectivity of the patient and triggers the process of symbolic elaboration of illness³. In this context, psychologists make use the psychological tests to aid in clinical practice and for research purposes, these instruments should be only, used by a licensed psychology professional, in according how is provided in paragraph 1 of article 13 of the law nº. 4.199/ 62, that regulates the profession in Brazil and must follow the norms described in resolution CFP nº. 005/2012 (FEDERAL COUNCIL OF PSYCHOLOGY).

The administration should be done in an illuminated setting and suitable for the examiner to focus on reading. Is important that instructions are clearly prior to application, usually scales are self-administered. In some cases, the items may be to read to the examinee who is unable to tick their own answers.

The Beck Anxiety Inventory - BAI - (Beck Anxiety Inventory)

Global mood disorders during hospitalization are frequent. The most common pattern of symptoms is undifferentiated, comprising a combination of excessive worry, anxiety, depression, and insomnia. Often, symptoms presented despite causing suffering and clinical implications, are not recognized as disorders or confused, with difficulty in diagnosis.⁴

Among the symptoms most presented by patients is anxiety. Some authors define anxiety as "a state of uncomfortable mood, a negative apprehension about the future, an unpleasant internal restlessness"⁵. In the neurosurgical clinic is observe reports of anxiety in broad aspects: the waiting for a surgery, the anxiety about the diagnosis, the anxiety related to the discharge and others symptoms. Therefore, it is necessary to use instruments as an aid in psychological practice in the hospital.

The Beck Anxiety Inventory (BAI) is a self-report scale, which measures the intensity of anxiety symptoms, created in 1988. It has originally designed for use with psychiatric patients, but its use has also proved to be adequate for the general population and it is very satisfactory for reliability and has validity with neuropsychological test. The inventory consists of 21 items related to the presence of anxious symptoms⁶. For each item, the subject must choose one of four levels of anxiety. That is choose a point on a likert scale of four points, ranging from 0 to 3, which they evolve as to the degree of intensity of the symptoms. Being 0 corresponding to "absent"; 1 corresponding to "gentle, does not bother me much"; 2 corresponding to "moderate, unpleasant, but I can support"; and 3 corresponding to "severe, I can hardly support" In case the subject chooses more than one level, the highest intensity must always be recorded.

The total score is the result of the sum of the scores of the individual items. The total score allows classification into levels of anxiety intensity. The sum of the scores obtained in each item results in a total score ranging from 0 to 63 points. The inventory with outpatients from 17 years.

The Beck Depression Inventory - BDI - (Beck Depression Inventory)

The depressive syndromes are recognize worldwide as a priority public health problem and are considers the leading cause of disability among various health problems. Depression impresses a psychic suffering on the individual who expressly interferes in the reduction of quality of life, productivity and social empowerment.⁵

According to the Whoqol-Bref, since the 1990s, depressive disorder has become more important in the role of collective health problems and it's considered the fourth most costly disease of all diseases worldwide. It has received different conceptualizations and classifications since its inception, with the adoption of distinct parameters, authors and schools that provoke controversies regarding the term.

Depression is relate to factors such as age, marital status, social class, and social conditions. It's a condition that affect all individuals at some stages in our lives, either as a transient mood when feeling depressed or melancholic, as a more serious form that can affect the individual's physical and psychological state.⁷

The Beck Depression Inventory (BDI) is the acronym that identifies the Beck Depression Inventory, initially created in 1961 and revised in 1979/1982, and it's used to measure the intensity of depression levels. In Brazil, it's been translated that it evaluates characteristic symptoms of depression, discriminating degrees of intensity of symptoms.⁶

The inventory consists of 21 categories of symptoms and attitudes that report presence depressive symptoms in behavior, cognitive, affective and somatic manifestations, including mood, sadness, pessimism, feelings of failure, dissatisfaction, feelings of guilt, feelings of punishment, self-punishment, craving, irritability, social isolation, indecision, inhibition at work, sleep disturbances, fatigue, loss of appetite, weight loss, somatic concerns and loss of libido.

The Lipp Adult Stress Symptoms Inventory - ISSL

Emotional stress is a complex and global reaction of the body, which involves physical, psychological, mental and hormonal components. Research reinforces that emotional stress can be detrimental to the physical and mental health of the human being, implying in their quality of life. In the hospital context, it can be seen that the experience of the disease process may be a triggering factor for stress.⁸

Some authors⁹ describe stress in a quadriphasic model that has the stages of alertness, resistance, near-exhaustion and exhaustion. The alert phase is considered the positive phase of stress, in which the human being is energized through the production of adrenaline, survival is preserved and a sense of fullness is often achieved. The second phase is resistance, where the individual automatically tries to deal with their stressors in order to maintain internal balance. If the stressors persist in frequency or intensity, there is a break in the person's resistance and it goes through the quasi-exhaustion phase. The final phase of stress is when severe illness can occur in the most vulnerable organs, such as heart attack, ulcers, psoriasis, depression and others.

Authors⁹ suggest that stress can be assessed by assessing stress-producing events, by assessing the cognitive / emotional aspects presented, by physiological and endocrine measures, and by diseases in target organs. The Lipp Adult Stress Symptom Inventory (ISSL) was constructed from this model. It contains three tables, corresponding to the four phases of stress, where the patient will report the symptoms he has experienced in the last 24 hours (Table 1), the symptoms he has experienced in the last week (Table 2), and the symptoms he experienced in the last month (Table 3). Table 1 contains 12 physical and 3 psychological symptoms, Table 2 is composed of 10 physical and 5 psychological symptoms and Table 3 consists of 12 physical and 11 psychological symptoms. For ISSL, which is easy to apply, it is not necessary to be literate because the items might be read to the person. It can be applied individually or in a group and its application takes approximately ten minutes.

The Mini-Mental State Examination (MMSE)

The Mini-Mental State Examination (MMSE) is among the most well-known cognitive screening tests as a clinical tool, it can be used to detect cognitive losses, follow-up of disease and response monitoring treatment. As a research tool, it has been widely used in population epidemiological studies.


This battery was adapted for the Brazilian population in 1994, who applied the tests in 80 elderly people free of neurological or psychiatric disease, and in 21 individuals with initial Alzheimer's disease. Both groups differed in all tests. The authors argue that these results indicate that the adaptation was adequate, and provide a standard for the expected performance in relation to dementias.

The MMSE is composed of several questions grouped into specific categories in order to evaluate the various cognitive functions: orientation, attention and calculation, visual-constructive ability, language and recall. 3 points (3 points), attention and calculation (5 points), remembrance of the 3 words (3 points), language (8 points), and capacity (1 point). With a score ranging from 0 to 30 points, it is simple and quick to apply. Studies have shown that the MMSE presents criteria highly sensitive to moderate and severe cognitive impairment, but the sensitivity decreases significantly for lighter or early degrees of decline.¹⁰

The instrument is divided into two sections; the first requires only oral responses and evaluates orientation, memory and attention, with the maximum score being 21. The second part refers to naming, following verbal and written commands, writing a sentence spontaneously and copying a complex polygon,

having a maximum score of 9. The total maximum score is 30 and the duration of the test is not measured. The MMSE has the possibility of being to use in the evaluation of children serving in the screening of higher mental functions.¹¹

Table 1 - Mini mental State Examination¹²

Mini-Mental State Examination (MMSE)		
Patient's Name: _____		Date: _____
<i>Instructions: Score one point for each correct response within each question or activity.</i>		
Maximum Score	Patient's Score	Questions
5		"What is the year? Season? Date? Day? Month?"
5		"Where are we now? State? County? Town/city? Hospital? Floor?"
3		The examiner names three unrelated objects clearly and slowly, then the instructor asks the patient to name all three of them. The patient's response is used for scoring. The examiner repeats them until patient learns all of them, if possible.
5		"I would like you to count backward from 100 by sevens." (93, 86, 79, 72, 65, ...) Alternative: "Spell WORLD backwards." (D-L-R-O-W)
3		"Earlier I told you the names of three things. Can you tell me what those were?"
2		Show the patient two simple objects, such as a wristwatch and a pencil, and ask the patient to name them.
1		"Repeat the phrase: 'No ifs, ands, or buts.'"
3		"Take the paper in your right hand, fold it in half, and put it on the floor." (The examiner gives the patient a piece of blank paper.)
1		"Please read this and do what it says." (Written instruction is "Close your eyes.")
1		"Make up and write a sentence about anything." (This sentence must contain a noun and a verb.)
1		"Please copy this picture." (The examiner gives the patient a blank piece of paper and asks him/her to draw the symbol below. All 10 angles must be present and two must intersect.) 
30		TOTAL

The measurement of cognitive performance through MEEM has limitations, especially in the case of early identification of cognitive decline. It is necessary to use other complementary scales so that one can investigate the cognitive dimension of the individual.

The anamneses were performed before the evaluation, which allowed the researchers to collect some socioeconomic data of the participants in order to know the profile of these patients. According to what was collected through the surveys, the age group of the participants comprises of 40-59 years, the majority belongs to the female sex.

The patients, for the most part, were female, mostly middle-aged. Brain aneurysm has stress as a risk factor. This difference in the sex variable can be explained with several studies in the literature that show that women are more susceptible to stress, in the face of acute stressors these demonstrate slower recovery of hormone levels.

According to some authors¹³ "The patient undergoing surgical procedure presents important psychological aspects [...] is afraid of pain, and anesthesia, of being disfigured or incapacitated. He is afraid to show fear, and fear of a thousand and one things. Above all, he is afraid of dying". The fear of death, rupture of the aneurysm and consequent sequels was a concrete fear, since this risk was present clinically. In this case, the patient needs to maintain with controlled levels of stress and anxiety and the socio-familiar support is essential. Despite this, the level of anxiety was minimal. The patient's family should be give attention, as this assumes an important role; their reactions influence the patients' own reactions. These help the beings to cross the stages of the disease and can.¹⁴

The patient's family acts as the primary force that determines the emotional quality of these occasions, but also because it is the family rather than the culture that ultimately determines the rites to be fulfil. Families are much less determine by the customs of their culture and by their way of doing things than they are selective, according to their own characteristics and pathologies, in relation to the ceremonial repertoire of their culture.

The work of the neuropsychologist should be that of the patient's follow-up in the preoperative period, where it can be useful to evaluate the patient, his intent and expectations. As well as his family, since the attention to these people and their families, regarding the expectations of the surgery and the benefits it can bring, listening to and discussing fears, demystifying fantasies and talking about anxiety and distress together with them will be an essential work for everyone's goal, or the resolution of the problem: cerebral aneurysm.

CONCLUSION

The hope is that this work will bring benefits to professionals who working with neurosurgery and neuropsychology, as well as patients regarding the treatment. In a second moment, the research made possible the construction of an evaluation script that used tests for neuropsychological evaluation. The Whoqol-Bref, BAI (Beck Anxiety Inventory), BDI (Beck Depression Inventory), Lipp Adult Stress Symptom Inventory (ISSL), Mental State Mini-Exam (MMSE- Mini Mental State Examination). Carrying out this a study, it was possible to verify that the study about neurocognitive alterations in adults with cerebral aneurysms can be contribute to Neuropsychology and Neurosurgery, since it aims to minimize deficits and promote improvement of the patient's quality of life and survival.

REFERENCES

- PINTO, M.H. ZAGO, M. Maria Fontão apud HOLANDA et al., 1995; BLACK & MATASSARIN-JACOBS. A compreensão do significado cultural do aneurisma cerebral e do tratamento atribuídos pelo paciente e familiares: um estudo etnográfico. *Rev. latino-am. enfermagem - Ribeirão Preto - v. 8 - n. 1 - p. 51-56 – janeiro, 2000.*
- WORLD HEALTH ORGANIZATION. Whoqol-bref: introduction, administration, scoring and generic version of the assessment. Geneva: program on mental health, 1996.
- SIMONETTI, A. Manual de psicologia hospitalar: o mapa da doença. São Paulo: Casa do Psicólogo, 2004.
- BOTEGA, N.J. et al. Transtornos do humor em enfermaria de clínica médica e validação de escala de medida (HAD) de ansiedade e depressão. *Revista de saúde pública. 29(5). 1995.*
- DALGALARRONDO, P. Psicopatologia e semiologia dos transtornos mentais. Porto Alegre: Artes Médicas Sul, 2000. 107-190 p.
- CUNHA. J.A. Manual da versão em português das Escalas Beck. São Paulo: Casa do psicólogo, 2001.
- OLIVEIRA, D.A.; GOMES, L; OLIVEIRA, R.F. Prevalência de depressão em idosos que frequentam centros de convivência. *Rev. Saúde Pública, São Paulo, v. 40, n. 4, Agosto. 2006.*
- SADIR, M.A; BIGNOTTO, M.M; LIPP, M.. Stress e qualidade de vida: influência de algumas variáveis pessoais. *Paidéia (Ribeirão Preto), Ribeirão Preto, v. 20, n. 45, p. 73-81, Apr. 2010.*
- LIPP, M.E.N. Manual do Inventário de Sintomas de Stress para Adultos de Lipp (ISSL). São Paulo: Casa do Psicólogo, 2000.
- MOTA et al. Triagem cognitiva: comparações entre o mini mental e o teste de trilhas. *Estudos de Psicologia I Campinas I 25(3) I 353-359. Julho–setembro, 2008.*

- LORENZON, S.F. Utilização do instrumento "mini mental state examination" em crianças escolares de 6 a 11 anos da rede de ensino particular de Porto Alegre, RS, Brasil [tese de mestrado]. Porto Alegre: Universidade Federal do Rio Grande do Sul; 2001. Disponível em: <http://www.lume.ufrgs.br/handle/10183/3140>. Acesso em: 05.03.2017. MINI EXAME DO ESTADO MENTAL (MEEM). Biblioteca Virtual em Saúde. Portal telessaúde, Brasil. São Paulo: SP.
- FOLSTEIN, MF; FOLSTEIN SE; McHugh PR. Mini-Mental State: A practical Method for Grading the cognitive State of patients for the clinician. J. Psychiatry. Rev.1975; 12: 189-198.
- ANGERAMI-CAMON, Valdemar Augusto (organizador). Psicologia hospitalar: teoria e prática. São Paulo: Pioneira Thomson Learning, 2003.
- KLÜBER-ROSS, E. Sobre a morte e o morrer. São Paulo: Edart; 2011.

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