ABSTRACT
Introduction: Stroke (stroke), or stroke, is characterized by the rapid loss of neurological function, due to clogging by disruption of blood supply to brain structures or disruption causing The blood that supports the brain with oxygen and glucose, transported by the cerebral blood vessels, stop reaching the region, causing the loss of the functionality of the neurons. Objective: The present study intends to demonstrate a methodology to follow the post-stroke recovery work and to verify the possible changes in general quality of life parameters, through the vital signs of these individuals, after a regular physical activity program and Recreational Method: Dialogues were carried out in order to raise awareness and establish preventive strategies. For the anthropometric analysis were collected weight, height and hip and waist circumferences. Body mass index (BMI) and waist hip ratio (WHR) were used to assess nutritional status. In addition, the heart rate per minute in rest and exertion was measured with the use of a Polar frequency gauge. A digital blood pressure meter was used to collect systolic and diastolic blood pressure. Results: The patient studied during the two years had BMI and WHR above the ideal, but no significant variation was identified over the years. Only the resting heart rate of January 2015 was above ideal. During the other months of 2015 and 2016, vital parameters were within normal range. Conclusion: After the work performed, the patient researched reported improvement in physical, emotional, motivational, social conditions and increased independence in daily activities.

Keywords: Cerebral Vascular Accident; Physical activity; Rehabilitation.

INTRODUCTION
The stroke (acronym: CVA), or stroke (acronym: BIRD), also known as stroke, is characterized by the rapid loss of neurological function, a consequence of a blockage (ischemia) by the interruption of the blood irrigation of the structures of the brain or rupture (haemorrhage) causing the blood to that sustains the brain with oxygen and glucose transported by the blood vessels in the brain, to stop, hit the region, causing the loss of functionality of the neurons. According to Tortora (2012), is a disease of sudden onset in which the patient may present with paralysis or difficulty moving the limbs on the same side of the body, difficulty in speech and/or articulation of the words and visual deficit, the sudden appearance of a part of the visual field. You can still evolve with coma, and other signs and, in certain situations, can lead to death. The STROKE of ischemic type is the most common in the human species.

The patient who suffers a STROKE and loses a large part of your aerobic capacity and the physical exercise performed in a correct way is essential in their rehabilitation. This routine varies from surgical intervention to medical treatment, passing later to the kinesiology treatment. This is, as far as possible, to restore functions and/or minimize the sequelae left. However, the condition tends to stabilize over time, and the patient usually presents with hemiparesis or hemiplegia, depending not only on the affected cerebral area, but also on the extent of this involvement. This makes the person become an eternal patient of physiotherapy, developing, for the most part, a relative activity. Another situation that usually occurs, becoming an aggravating factor, is when the patient returns home and remains in sedentarism. This sedentary lifestyle may be one of the causes of his vascular accident and may also be the cause of a new accident (TORTORA, 2012; LANCHAJR & LANCHJA, 2016).

People with stroke sequelae are mostly away from regular physical activity to maintain their health or organic condition, which causes a worsening of the quality of life. What they are offered as an activity option are the sessions of physiotherapy, which often becomes monotonous and tedious, since the deficiency is already established and there is very little to do, except to avoid aggravation Or the emergence of secondary deficiencies of a preventive nature, that is, activities that prevent the occurrence of a stroke. In the light of this, questions arise about which activities involve rehabilitation with individuals and / or patients who have already developed a stroke. Researchers such as Paffenbarger & Olsen (1996) argue that few studies have been developed regarding stroke and physical activity. In Brazil, there is no known physical and / or sports activity program for people stroke sequelae, who have graduated from rehabilitation programs. Studies that have been developed with the objective of verifying the changes in the emotional behavior of these individuals after a regular physical activity program, with an emphasis on improving their quality of life, are not known. Thus, the present study intends to demonstrate a methodology to follow the post-stroke recovery work and to verify the possible changes in the parameters of general quality of life, through the vital signs of these individuals, after performing a regular program of physical activity And recreational for the present study.
Physical exercise intervention can be performed in the acute, subacute and chronic phase of stroke and includes aerobic activities, strength exercises, lifestyle changes or other strategies. The incentive to practice regular physical activity and the recovery of good eating habits, aim at maintaining physical and mental health, which should be a priority in today’s society, otherwise, the stroke will have more and more space in the reality of the population. Lobo and Lopes (2010) confirm that gradually the importance of physical activity, aiming at quality of life, has been established, being a basic requirement for healthy growth and development, besides being a regulator of body fat. The authors also comment that the importance of physical activity aiming at quality of life has been recognized.

According to Felce (1997), the quality of life, besides the food aspect and physical activity, encompasses the domains of life in six different areas: physical, mental, social, productive, emotional and civic. To cultivate a good quality of life it is essential to pay attention to the habits adopted in the day to day.

The protective effect of physical activity may partially mediate these effects through other risk factors for stroke. Physical activity has a favorable effect on the reduction of blood pressure, lipid profile, insulin sensitivity, body weight, blood coagulation and fibrinolysis (Hu et al., 2002). Physical exercise intervention can be performed in the acute, subacute and chronic phase of stroke and includes aerobic activities, strength exercises, lifestyle changes or other strategies.

For Duncan et al. (2003), the effect of exercise on quality of life is much less clear than its effect on physical training. The evaluation of the benefits of a physical exercise program for people who had stroke more than six months later showed that in addition to the significant benefits of functional limitations such as resistance, balance and mobility, an improvement in quality of life was observed in the initial months Rehabilitation.

Cardiorespiratory fitness is considered one of the most important components of physical fitness related to health and, according to Monteiro (2004), its improvement and maintenance should be among the main objectives of any systematic exercise program, since adequate cardiopulmonary fitness is associated to a lesser occurrence of organic disorders.

Thus, the results of different studies show that physical activity is an important factor to reduce the risk of stroke. The protective effect of physical activity on the incidence of stroke and also in the post-stroke phase needs to be highlighted in the follow-up of this important public health problem.

METHODOLOGY

Before initiating the work proposal for the recovery of the research subject who suffered an ischemic Stroke, dialogues were held with the purpose of raising awareness and stipulating strategies to be taken to optimize treatment. Doubts were also raised regarding the methodology of work to be applied.

The subject was followed up between the years 2015 and October 2016. Throughout this period, anthropometric assessments were carried out in order to follow the morphological changes that occurred. All evaluations were carried out at the Laboratory of Exercise Physiology of UNIVILLE - LAFIEX. The laboratory has an electronic scales of Filizola brand, with a maximum limit of 180kg and precision of 0.1kg and a stadiometer of the Gofeka brand, with a maximum limit of 230cm. Body mass, height and waist and hip circumferences were collected.

During the years 2015 and 2016, several activities were carried out with the aim of benefiting the patient, such as upper and lower limb stretching, balance exercises, eventual walking, 5km races on the "Lauro Holzhapfel" athletics track, with a volume of three hours a week, bodybuilding at UNIVILLE's Physical Activity Center (CAF), with a two-hour volume twice a week, an exercise and elliptical cycle for 60 minutes, twice a week, a 5km street run twice a week, and Participation of a São Silvestre race in the year 2015.

In addition to the anthropometric follow-up with weight, height, body mass index (BMI) and waist circumference ratio (WHR), a Polar frequency meter was used to monitor the Heart Rate at Rest (FrRep), Maximum Heart Rate (FrMax), which also helped to monitor the application time of each activity and a ReliOn digital systolic and diastolic pressure gauge.

RESULTS AND DISCUSSION

Table 1 shows the basic characteristics of the research subject, where they are mentioned age in years, body mass in kg and height in meters.

<table>
<thead>
<tr>
<th>Sample</th>
<th>Age (years)</th>
<th>Body Mass (kg)</th>
<th>Stature (meters)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Man (2015)</td>
<td>57,5±0,02</td>
<td>94,4±0,8</td>
<td>1,90±0,0</td>
</tr>
<tr>
<td>Man (2016)</td>
<td>58,3±0,02</td>
<td>94,1±0,7</td>
<td>1,90±0,0</td>
</tr>
</tbody>
</table>

Meaning of items: X mean, SD standard deviation.

The averages and standard deviations of the Body Mass Index (BMI) and the Hip Waist Ratio (WHR), referring to the months of practice, are presented in table 2.

<table>
<thead>
<tr>
<th>Sample</th>
<th>BMI (kg/m²)</th>
<th>WHR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Man (2015)</td>
<td>26,2±0,1</td>
<td>1,05±0,10</td>
</tr>
<tr>
<td>Man (2016)</td>
<td>26,1±0,2</td>
<td>1,02±0,11</td>
</tr>
</tbody>
</table>

BMI body mass index, WHR hip waist ratio, mean X, SD standard deviation.

The mean systolic blood pressure and diastolic blood pressure (mmHg) of 2015 and 2016 evaluated during the first ten months of the year are shown in figure 1.

With analysis of the WHR, it was observed that in the years 2015 and 2016 the research subject had the relation above the desired one according to Heyward and Stolarczk (1996), the one indicated for the age group of 50 to 59 years is of 0.90 - 0.96. Analyzing body mass index (BMI), as recommended by the World Health Organization (WHO / WHO), the individual was classified as overweight in 2015 and 2016. (World Health Organization, 1995). These results indicate that, possibly, there is an amount of stored abdominal adipose tissue. Since this fat deposit is closely related to chronic diseases such as type 2 diabetes mellitus, hypertension, hematological diseases and stroke (AMATO, 1997; BRAY, 1990), it is important that preventive measures be taken to control this situation and prevent future accidents.
Table 3 - Resting Heart Rate Report of 2015.

<table>
<thead>
<tr>
<th>Heart Rate Report by Minutes (bpm) REST</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>Mai</th>
<th>Jun</th>
<th>Jul</th>
<th>Ago</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main</td>
<td>91</td>
<td>47</td>
<td>51</td>
<td>49</td>
<td>46</td>
<td>52</td>
<td>50</td>
<td>51</td>
<td>53</td>
<td>54</td>
<td>56</td>
<td>56</td>
</tr>
<tr>
<td>Stand. Desv.</td>
<td>3.4</td>
<td>4.7</td>
<td>6.9</td>
<td>12.2</td>
<td>5.3</td>
<td>8.4</td>
<td>8.6</td>
<td>7.7</td>
<td>10.2</td>
<td>7.2</td>
<td>11.0</td>
<td>15.3</td>
</tr>
<tr>
<td><strong>Source:</strong> Own / researcher. Average: 56bpm and Standard Deviation 3.5bpm. ** bpm at rest above recommended.**</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Table 4 - Maximum Heart Rate Report of 2015.

<table>
<thead>
<tr>
<th>Heart Rate Report by Minutes (bpm) MAXIMUM</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>Mai</th>
<th>Jun</th>
<th>Jul</th>
<th>Ago</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main</td>
<td>177</td>
<td>116</td>
<td>121</td>
<td>121</td>
<td>121</td>
<td>123</td>
<td>123</td>
<td>128</td>
<td>128</td>
<td>131</td>
<td>127</td>
<td>129</td>
</tr>
<tr>
<td>Stand. Desv.</td>
<td>36.4</td>
<td>21.3</td>
<td>16.0</td>
<td>16.9</td>
<td>16.5</td>
<td>11.2</td>
<td>14.6</td>
<td>15.2</td>
<td>13.5</td>
<td>16.3</td>
<td>13.7</td>
<td>6.5</td>
</tr>
<tr>
<td><strong>Source:</strong> Own / researcher. Average: 129bpm and Standard Deviation 6.5bpm. **</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

Graph 1 - Minimum Heart Rate Report for the years 2015 and 2016.

During the prescription, only the resting heart rate in January 2015, according to table 3, was above recommended. In the other months of 2015 and in the months of 2016, the maximum and minimum heart rate remained within the recommended, according to methodology proposed by Karvonen et al. (1957).

Table 5 - Resting Heart Rate Report of 2016.

<table>
<thead>
<tr>
<th>Heart Rate Report by Minutes (bpm) REST</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>Mai</th>
<th>Jun</th>
<th>Jul</th>
<th>Ago</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main</td>
<td>54</td>
<td>53</td>
<td>51</td>
<td>57</td>
<td>57</td>
<td>56</td>
<td>49</td>
<td>52</td>
<td>44</td>
<td>50</td>
<td>52</td>
<td>52</td>
</tr>
<tr>
<td>Stand. Desv.</td>
<td>7.0</td>
<td>5.3</td>
<td>8.1</td>
<td>7.1</td>
<td>4.2</td>
<td>12.4</td>
<td>7.4</td>
<td>4.3</td>
<td>5.0</td>
<td>6.0</td>
<td>2.4</td>
<td>2.4</td>
</tr>
<tr>
<td><strong>Source:</strong> Own / researcher. Average: 52bpm and Standard Deviation 2.4 bpm. ** bpm at rest above recommended.**</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Table 6 - Maximum Heart Rate Report of 2016.

<table>
<thead>
<tr>
<th>Heart Rate Report by Minutes (bpm) MAXIMUM</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>Mai</th>
<th>Jun</th>
<th>Jul</th>
<th>Ago</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main</td>
<td>133</td>
<td>139</td>
<td>126</td>
<td>123</td>
<td>126</td>
<td>130</td>
<td>125</td>
<td>132</td>
<td>127</td>
<td>128</td>
<td>129</td>
<td>129</td>
</tr>
<tr>
<td>Stand. Desv.</td>
<td>17.7</td>
<td>17.4</td>
<td>14.1</td>
<td>16.9</td>
<td>16.7</td>
<td>7.9</td>
<td>13.9</td>
<td>13.0</td>
<td>17.5</td>
<td>11.0</td>
<td>3.3</td>
<td>3.3</td>
</tr>
<tr>
<td><strong>Source:</strong> Own / researcher. Average: 129bpm and Standard Deviation 3.3bpm. **</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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</tbody>
</table>

CONCLUSION
The data presented here indicate important factors in the interpretation of the results obtained. According to table 2, it can be observed that physical activities were fundamental for the maintenance of BMI and WHR, as a significant increase of the mean was not identified. However, it is worth noting that BMI does not take biological tissues into account, therefore, it is recommended that nutritional status assessments be performed with the use of skin folds to obtain a more reliable result.

It can be concluded that, given the propensity for hereditary and / or genetic diseases such as changes in cardiac fibers, it is necessary to develop a program of physical activities in order to strengthen these fibers and all cardiovascular and / or circulatory system involved, including control Of the nutritional status of the participant, since it is known that a high level of adiposity interferes with the rehabilitation of the patient with ischemic stroke.

According to Tortora (2012); Guedes (2006) and Lancha Jr & Lancha (2016), it is fundamental to make the researcher aware of the importance of acquiring good habits, such as regular physical activity and adequate food. It should be noted that the patient researched reported improvement in physical, emotional, motivational, social conditions and increased independence in daily activities.

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INTRODUCTION: Stroke (stroke), or stroke, also known as stroke, is characterized by the rapid loss of neurological function, due to clogging by disruption of blood supply to brain structures or disruption causing The blood that supports the brain with oxygen and glucose, transported by the cerebral blood vessels, stop reaching the region, causing the loss of the functionality of the neurons. Objectives: The present study intends to demonstrate a methodology to follow the post-stroke recovery work and to verify the possible changes in general quality of life parameters, through the vital signs of these individuals, after a regular physical activity program and Recreational Method: Dialogues were carried out in order to raise awareness and establish preventive strategies. For the anthropometric analysis were collected weight, height and hip waist circumferences. Body mass index (BMI) and waist hip ratio (WHR) were used to assess nutritional status. In addition, the heart rate per minute at rest and exertion was measured with the use of a Polar frequency gauge. A digital blood pressure meter was used to collect systolic and diastolic blood pressure. Results: The patient studied during the two years had BMI and WHR above the ideal, but no significant variation was identified over the years. Only the resting heart rate of January 2015 was above ideal. During the other months of 2015 and 2016, vital parameters were within normal range. Conclusion: After the work performed, the patient researched reported improvement in physical, emotional, motivational, social conditions and increased independence in daily activities.

Keywords: Cerebral Vascular Accident; Physical activity; Rehabilitation.

INTRODUCTION: L’accident vasculaire cérébral (accident vasculaire cérébral) ou accident vasculaire cérébral (AVC) se caractérise par la perte rapide de la fonction neurologique, due au colmatage causé par l’interruption de l’approvisionnement en sang des structures cérébrales ou la perturbation causant Le sang qui soutient le cerveau avec l’oxygène et le glucose, transportés par les vaisseaux sanguins cérébraux, cessent d’atteindre la région, entraînant la perte de la fonctionnalité des neurones. Objectif: La présente étude vise à démontrer une méthodologie pour suivre les travaux de récupération post-AVC et vérifier les changements possibles dans les paramètres généraux de qualité de vie, à travers les signes vitaux de ces individus, après un programme d’activité physique régulier et Méthodes récréatives: Dialogues Ont été réalisées afin de sensibiliser et d’être au fait des stratégies préventives. Pour l’analyse anthropométrique ont été collectés poids, hauteur et circonférences. Un indice de masse corporelle (IMC) et un rapport taille-hanches (RCS) ont été utilisés pour évaluer l’état nutritionnel. En outre, la fréquence cardiaque par minute au repos et à l’effort a été mesurée à l’aide d’une jauge de fréquence. Un tonomètre numérique a été utilisé pour recueillir la pression artérielle systolique et diastolique. Résultats: Le patient étudié au cours des deux années avait un IMC et un RCS supérieur à l’idéal, mais aucune variation significative n’a été identifiée au cours des années. Seul le rythme cardiaque au repos de janvier 2015 était au-dessus de l’idéal. Pendant les autres mois de 2015 et 2016, les paramètres vitaux étaient dans la fourchette normale. Conclusion: Après le travail effectué, la patiente faisant des recherches a signalé une amélioration des conditions physiques, émotionnelles, motilitaires, sociales et une plus grande indépendance dans les activités quotidiennes.

Keywords: Accident vasculaire cérébral; Activité physique; Réhabilitation.

INTRODUCTION: El accidente cerebrovascular (accidente cerebrovascular), o accidente cerebrovascular, también conocido como accidente cerebrovascular, se caracteriza por la rápida pérdida de la función neurológica, debido a la obstrucción por la interrupción del suministro de sangre a las estructuras cerebrales o la ruptura causando La sangre que sostiene el cerebro con oxígeno y glucosa. Transportados por los vasos sanguíneos cerebrales, dejan de llegar a la región, causando la pérdida de la funcionalidad de las neuronas. Objetivo: El presente estudio pretende demostrar una metodología para seguir el trabajo de recuperación post-accidente cerebrovascular y verificar los posibles cambios en los parámetros generales de calidad de vida, a través de los signos vitales de estos individuos, tras un programa regular de actividad física y Método Recreativo: Diálogos Se llevaron a cabo con el fin de sensibilizar y establecer estrategias preventivas. Para el análisis antropométrico se recogieron...
peso, altura y circunferencias de cadera y cintura. Se utilizó el índice de masa corporal (IMC) y la proporción de cadera de cintura (RCQ) para evaluar el estado nutricional. Además, se midió la frecuencia cardíaca por minuto en reposo y esfuerzo con el uso de un medidor de frecuencia Polar. Se utilizó un medidor digital de la presión arterial para recoger la presión arterial sistólica y diastólica. Resultados: El paciente estudiado durante los dos años tenía IMC y RCM por encima del ideal, pero no se identificó variación significativa a lo largo de los años. Sólo el ritmo cardíaco en reposo de enero de 2015 era superior al ideal. Durante los otros meses de 2015 y 2016, los parámetros vitales estaban dentro del rango normal. Conclusión: Después del trabajo realizado, el paciente investigado informó de mejoras en las condiciones físicas, emocionales, motivacionales, sociales y una mayor independencia en las actividades diarias.

Palabras clave: accidente cerebrovascular; Actividad física; Rehabilitación.

ATIVIDADES FÍSICAS NA REABILITAÇÃO APÓS ACIDENTE VASCULAR CEREBRAL (AVC) - EXPERIÊNCIA NA CIDADE DE JOINVILLE/SC, NOS ANOS DE 2015 E 2016

RESUMO

Introdução: O acidente vascular cerebral (AVC), ou acidente vascular encefálico (AVE), também conhecido como derrame cerebral, é caracterizado pela perda rápida de função neurológica, decorrente do entupimento pela interrupção da irrigação sanguínea das estruturas do encéfalo ou rompimento fazendo com que o sangue que sustenta o cérebro com oxigênio e glicose, transportados pelos vasos sanguíneos cerebrais, deixem de atingir a região, ocasionando perda da funcionalidade dos neurônios. Objetivo: O trabalho aqui apresentado pretende demonstrar uma metodologia para acompanhar o trabalho de recuperação pós-AVC e verificar as possíveis alterações nos parâmetros de qualidade geral de vida, através dos sinais vitais dessas indivíduos, após a realização de um programa regular de atividade física e recreativa. Método: Foram realizados diálogos com o objetivo de conscientizar e estipular estratégias preventivas. Para a análise antropométrica foram coletados peso, estatura e as circunferências do quadril e da cintura. O índice de massa corporal (IMC) e a relação cintura quadril (RCQ) foram utilizadas para avaliação do estado nutricional. Além disso, foi mensurado o batimento cardíaco por minuto em repouso e esforço com a utilização de um frequencímetro Polar. Um medidor de pressão arterial digital, foi utilizado para coletar a pressão sistólica e diastólica. Resultados: O paciente pesquisado durante os dois anos, apresentou o IMC e a RCQ acima do ideal, porém não foi identificada uma variação significativa ao longo dos anos. Apenas a frequência cardíaca de repouso de janeiro de 2015 estava acima do ideal. Durante os outros meses de 2015 e 2016, os parâmetros vitais estavam dentro do normal. Conclusão: Após o trabalho realizado, o paciente pesquisado relatou melhora nas condições físicas, emocionais, motivacionales, sociais e aumento da independência nas atividades cotidianas.

Palavras-chave: Acidente Vascular Cerebral; Atividade Física; Reabilitação.