

POST STROKE RECOVERY- THE REHABILITATION OF THE PACIENT

Jacek Sobon

Leuciuc Florin¹

Student Oltean Anca- Maria¹

¹Stefan cel Mare University of Suceava, Romania

Key Words: *Central Vascular Accident (CVA), recovery, ADL-s.*

Abstract Stroke is an acute neurological disfunction with vascular origin and produces hemiplegia, half of the body's paralysis /palsy. I took my patient five months after the stroke, also having left hemiplegia. By using a recovery programme during five weeks (10 meetings) I managed to correct the following parameters: standing and sitting at the edge of the body, gaining equilibrium while sitting, standing in orthostatism, using the affected leg/limb to partially support the body weight.

In my opinion, we should take more into account our health and especially the persons who are bound to suffer from this disability/disfunction should be more aware. In order to present and to inform better about this dysfunction, I made this flyer for all social categories.

Introduction

CVA, known as apoplexy or stroke, is an acute neurological dysfunction with vascular origin that produces hemiplegia, half of the body's paralysis, including limbs, trunk and sometimes also the face. This disease is always present on the opposite side of the vascular accident: if the accident occurred on the left central hemisphere, hemiplegia will affect the right side of the body and the other way round. Strokes can be classified into two major categories: ischemic- with the most worldwide cases, more than 70% and hemorrhagic.

Recovery may be initiated after 48 hours from the stroke, providing that the patient's status is stable. The initial recovery period depends on the localization and extension of the cerebral injury, patient's age and associated diseases.

Rehabilitation after a CVA does not mean only recovering from metrical, sensitive, sensorial or emotional dysfunctions, but it also means to enable the patient to regain his or her social and family status in order to have a normal life.

Regarding these, we must mention the ADLs= activities of daily living, as following:

- Self-care (dressing, washing, eating, personal hygiene);
- Mobility (walking, moving in bed, transferring in the wheelchair, bed);
- Communication (speaking at the phone, reading, writing, specific gesture);
- Manipulation (door handle, drawers, windows, taps, keys).

In my opinion, recovery after a CVA/stroke must coincide with patient's expectations, and we, the specialists must make them feel useful, belonging to the society, despite their dysfunction.

Material-method

Kinesytherapeutic Evaluation Paper

Last Name: D.

First Name: A.

Age: 83 years

Sex: Female

Name of the present disease: Right profound Sylvian Embolic CVA with hemorrhagic transformation, Left hemiplegia.

Neuromuscular test

1. Muscular testing using the muscular scala from 0-5

2. Sensibility testing

- Subjective sensibility: Lasègue Test (raising the affected superior limb→ strong pain)
- Tactile sensibility (using a piece of cotton)
→ diminished= hipoaesthesia
→ abolished= anaesthesia

3. Articular testing

4. Muscular tonus

Barthel Test, "stroke scala"- a test used with the hemiplegic patients after CVAs. This test takes into account the "life quality" ADLs, the performance of the patients with infirmities, disabilities.

General Goals:

- to recover the functional remnants on which the patient's capacities and activities relies on;
- to offer a proper physical and emotional support;
- to reeducate walking;
- to encourage the patient to do specific activities that could give him/her independence of having a normal life.

Short-term Goals

- to stand up and sit at the bed's edge;
- to sit in equilibrium;
- to stand up from sitting in orthostatism;
- to prop on the affected leg.

Table No.1 Kinesytherapeutic Programe

No.	Region	Position	Exercise	Dosage	Observations
1.	Neck	Laid on the back	Lateral flexion of the neck. The therapist helps the pacient to raise the head, undertaking half of the weight from the pillow and the pacient tries to slowly lay the head on the pillow, excentrically contracting the lateral flexors of the neck.(Picture.1)	2x5	We will tell the pacient all the time: „Lay your head on the pillow!” „Raise your head!”
2.	Superior Limb	Standing	Longitudinal tractions with the superior limb. (Picture.2)	1/meeting	It is used to ease the spastic hand's tension.
3.	Superior Limb	Standing	Massage of the limb in warm water.	1/meeting	It is used to ease the spastic hand's tension.
4.	Superior Limb	Standing	With passive movements we raise the limb in frontal and saggittal plane up to a painful point, keeping 10 seconds; we relax the hand and we raise it again up to the next painful point. (Picture. 3)	2 times for each plane	Because the limb is spastic, the best position is standing.
5.	Trunk	Standing	Changing the weight centre. The pacient has the hands on the hips and turns the head and the trunk to the therapist (positioned at the back of the pacient) and looks above the shoulde; the pacient returns to the initial position and repeats the exercise on the other side.	3x3	This exercise helps the pacient to gain self-confidence, by moving independently.
6.	Buttocks	Laid on the	Passive raising of the pelvis followed by the pacient's help (semiactive	2x10	

		back	movements) (Picture.4)		
7.	Inferior Limb	Laid on the back	Passive movements: flexion, extension, abduction, adduction, external rotation, internal rotation. (Pictures.5,6)	2x10	
8.	Inferior Limb	Laid on the back	Flexion and extension with resistance(opposition).	2x5	The patient will be encouraged every time. We will permanently check the position of the trunk.
9.	Inferior Limb	Standing	Bicycle.	5x2min	. We will permanently check the position of the trunk.
10.	Inferior Limb	From standing to orthostatism	Exercises for helping the patient prop on the affected limb. 1. Raising at the edge of the bed using the crutch and the therapist's support (the action will be initiated from the hemiplegic side). 2. We put an object of 6-7 cm height under the inferior limb. We give the patient her crutch and we tell her to stand up and to keep the affected limb for 10 seconds, then to rest. The therapist will be positioned on the lateral side of the patient in order to observe and to correct the knee.(Picture. 7)	2x5	The therapist will check all the parts of the body during standing up.

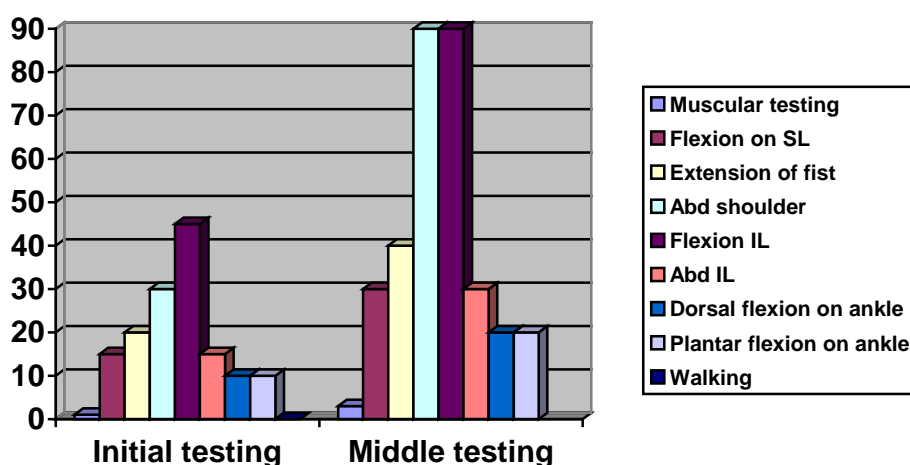
Results

Presentation and Interpretation of the dates

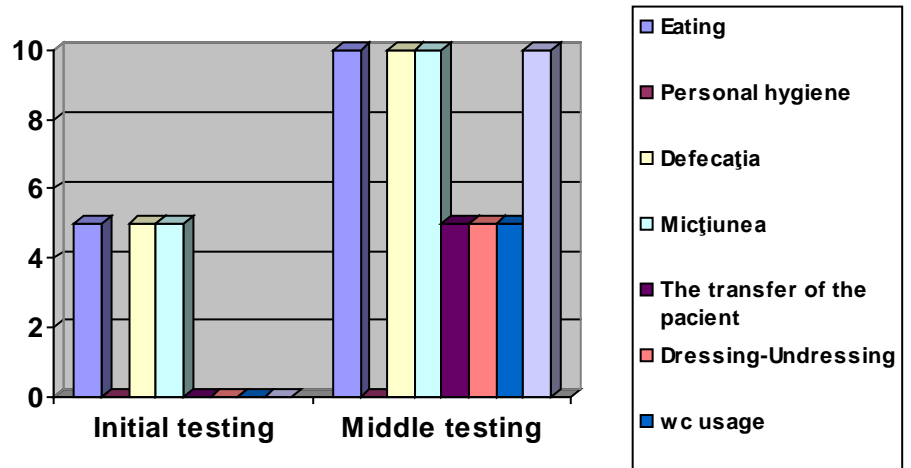
Table No. 2. The values of the tested parameters (Neuromuscular tests)

Observed parameters	Initial Testing	Middle Testing
Muscular testing (0-5)	Superior Limb: 0 Inferior Limb: 1	Superior Limb: 1 Inferior Limb: 3
Sensibility	Subjective: IL- No Tactile: SL- Hipoaesthesia (the patient responds to stimulus applied only on the forearm).	Subjective: IL- YES (hip) Tactile: the patient responds to stimulus all over the superior limb.
Articular testing	SL: Passive flexion: 15° Active flexion: 0° Fist: Passive extension: 20° Shoulder: Abd: 30° IL: Passive flexion: 45° Abd: 15° Ankle: Dorsal flexion: 10° Plantar flexion: 10°	SL: Passive flexion: 30° Active flexion: 0° Fist: Passive extension: 40° Shoulder: Abd: 90° IL: Passive flexion: 90° Abd: 30° Ankle: Dorsal flexion: 20° Plantar flexion: 20°
Muscular tonus	SL: Increased piramidal hypertonia.	SL: Medium to low piramidal hypertonia.
Walking	-	With crutch (Picture. 8)

Neuromuscular tests



Barthel Test



Discussions

I took my patient five months after the stroke, on 23rd March 2010, with left hemiplegia. With the proposed recovery program during 5 weeks (10 meetings) I managed to improve the following aspects: standing up and sitting at the edge of the bed, gaining equilibrium while sitting, standing in orthostatism from sitting, propping on the affected limb.

In my opinion, we should take more into account our health and especially the persons who are bound to suffer from this disability/dysfunction should be more aware. In order to present and to inform better about this dysfunction, I made this flyer for all social categories.

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Attachement

Picture 1. Lateral flexion of the neck Picture 2. Longitudinal tractions



Picture 3. Passive movements with keeping Picture 4. Passive raising of the pelvis



Picture 5. Flexion-extension

Picture 6. Internal rotation-external rotation



Picture 7. Standing up on the affected limb. Picture 8. Walking with crutch



Titlu : Recuperarea post- avc- reintegrarea pacientului în societate.

Cuvinte cheie : AVC, recuperare, ADL-uri.

Rezumat: AVC este o disfuncție neurologică acută de origine vasculară care provoacă hemiplegie, paralizia a jumătate din corp. Am preluat pacienta la cinci luni de la accident, având hemiplegie stângă. Prin aplicarea programului de recuperare eșalonat în 5 săptămâni(10 ședințe) s-au obținut următoarele îmbunătățiri: ridicări în șezând la marginea patului, echilibrarea în șezând, ridicarea din șezând în ortostatism, sprijinul pe piciorul afectat.

Consider că trebuie să acordăm o atenție mai mare sănătății, iar cei care sunt predispuși la aceste boli să fie mai atenți. Pentru a oferi informații suplimentare asupra acestei disfuncții neurologice propun un pliant adresat tuturor categoriilor sociale.

Titre: Recuperation post avc – reintegration de patient dans la societe.

Mots-clés:: AVC, recuperation, ADL.

Résumé: L'AVC c'est un trouble neurologique aigu, d'origine vasculaire qui produit hémiplegie, la paralysie d'une moitié du corps. J'ai pris le patient á cinq mois après l'accident vasculaire avec une hémiplegie gauche. Utiliser un programme de récupération, pendant cinq semaines, dix sessions, nous avons accompli les objectifs á court terme : la levée dans l'assise, l'équilibre dans le position assise, la levée en pieds, l'appui sur la jambe précieus.

Selon mon opinion, nous devons accorder beaucoup d'attention au santé, en particulier ceux qui sont prédisposés á ces maladies devraient être plus prudents. Pour offrir des information supplémentaires sur le dysfonctionnements neurologiques, je propose une brochure adressée á tous les groupes sociaux.