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LAMPIRAN

SKOR FUGL-MEYER UPPER EXTREMITY

FMA-UE PROTOCOL

Rehabilitation Medicine, University of Gothenburg

**FUGL-MEYER ASSESSMENT
UPPER EXTREMITY (FMA-UE)
Assessment of sensorimotor function**

ID:
Date:
Examiner:

Activate
Go to Start

Fugl-Meyer AR, Jaasko L, Leyman I, Olsson S, Steglind S: The post-stroke hemiplegic patient. A method for evaluation of physical performance. Scand J Rehabil Med 1975, 7:13-31.

A. UPPER EXTREMITY, sitting position				
I. Reflex activity		none	can be elicited	
Flexors: biceps and finger flexors (at least one)		0	2	
Extensors: triceps		0	2	
Subtotal I (max 4)				
II. Volitional movement within synergies, without gravitational help		none	partial	full
Flexor synergy: Hand from contralateral knee to ipsilateral ear. From extensor synergy (shoulder adduction/ internal rotation, elbow extension, forearm pronation) to flexor synergy (shoulder abduction/ external rotation, elbow flexion, forearm supination). Extensor synergy: Hand from ipsilateral ear to the contralateral knee	Shoulder retraction	0	1	2
	Shoulder elevation	0	1	2
	Shoulder abduction (90°)	0	1	2
	Shoulder external rotation	0	1	2
	Elbow flexion	0	1	2
	Forearm supination	0	1	2
	Shoulder adduction/internal rotation	0	1	2
	Elbow extension	0	1	2
	Forearm pronation	0	1	2
	Subtotal II (max 18)			
III. Volitional movement mixing synergies, without compensation		none	partial	full
Hand to lumbar spine hand on lap	cannot perform or hand in front of ant-sup iliac spine hand behind ant-sup iliac spine (without compensation) hand to lumbar spine (without compensation)	0	1	2
Shoulder flexion 0° - 90° elbow at 0° pronation-supination 0°	immediate abduction or elbow flexion abduction or elbow flexion during movement flexion 90°, no shoulder abduction or elbow flexion	0	1	2
Pronation-supination elbow at 90° shoulder at 0°	no pronation/supination, starting position impossible limited pronation/supination, maintains starting position full pronation/supination, maintains starting position	0	1	2
Subtotal III (max 6)				
IV. Volitional movement with little or no synergy		none	partial	full
Shoulder abduction 0 - 90° elbow at 0° forearm neutral	immediate supination or elbow flexion supination or elbow flexion during movement abduction 90°, maintains extension and pronation	0	1	2
Shoulder flexion 90° - 180° elbow at 0° pronation-supination 0°	immediate abduction or elbow flexion abduction or elbow flexion during movement flexion 180°, no shoulder abduction or elbow flexion	0	1	2
Pronation/supination elbow at 0° shoulder at 30°- 90° flexion	no pronation/supination, starting position impossible limited pronation/supination, maintains start position full pronation/supination, maintains starting position	0	1	2
Subtotal IV (max 6)				
V. Normal reflex activity assessed only if full score of 6 points is achieved in part IV; compare with the unaffected side		hyper	lively	normal
Biceps, triceps, finger flexors	2 of 3 reflexes markedly hyperactive 1 reflex markedly hyperactive or at least 2 reflexes lively maximum of 1 reflex lively, none hyperactive	0	1	2
Subtotal V (max 2)				
Total A (max 36)				

B. WRIST support may be provided at the elbow to take or hold the starting position, no support at wrist, check the passive range of motion prior testing		none	partial	full
Stability at 15° dorsiflexion elbow at 90°, forearm pronated shoulder at 0°	less than 15° active dorsiflexion dorsiflexion 15°, no resistance tolerated maintains dorsiflexion against resistance	0	1	2
Repeated dorsiflexion / volar flexion elbow at 90°, forearm pronated shoulder at 0°, slight finger flexion	cannot perform volitionally limited active range of motion full active range of motion, smoothly	0	1	2
Stability at 15° dorsiflexion elbow at 0°, forearm pronated slight shoulder flexion/abduction	less than 15° active dorsiflexion dorsiflexion 15°, no resistance tolerated maintains dorsiflexion against resistance	0	1	2
Repeated dorsiflexion / volar flexion elbow at 0°, forearm pronated slight shoulder flexion/abduction	cannot perform volitionally limited active range of motion full active range of motion, smoothly	0	1	2
Circumduction elbow at 90°, forearm pronated shoulder at 0°	cannot perform volitionally jerky movement or incomplete complete and smooth circumduction	0	1	2
Total B (max 10)				

C. HAND support may be provided at the elbow to keep 90° flexion, no support at the wrist, compare with unaffected hand, the objects are interposed, active grasp		none	partial	full
Mass flexion from full active or passive extension		0	1	2
Mass extension from full active or passive flexion		0	1	2
GRASP				
a. Hook grasp flexion in PIP and DIP (digits II-V), extension in MCP II-V	cannot be performed can hold position but weak maintains position against resistance	0	1	2
b. Thumb adduction 1-st CMC, MCP, IP at 0°, scrap of paper between thumb and 2-nd MCP joint	cannot be performed can hold paper but not against tug can hold paper against a tug	0	1	2
c. Pincer grasp, opposition pulpa of the thumb against the pulpa of 2-nd finger, pencil, tug upward	cannot be performed can hold pencil but not against tug can hold pencil against a tug	0	1	2
d. Cylinder grasp cylinder shaped object (small can) tug upward, opposition of thumb and fingers	cannot be performed can hold cylinder but not against tug can hold cylinder against a tug	0	1	2
e. Spherical grasp fingers in abduction/flexion, thumb opposed, tennis ball, tug away	cannot be performed can hold ball but not against tug can hold ball against a tug	0	1	2
Total C (max 14)				

D. COORDINATION/SPEED , sitting, after one trial with both arms, eyes closed, tip of the index finger from knee to nose, 5 times as fast as possible		marked	slight	none
Tremor		0	1	2
Dysmetria	pronounced or unsystematic slight and systematic no dysmetria	0	1	2
		≥ 6s	2 - 5s	< 2s
Time start and end with the hand on the knee	6 or more seconds slower than unaffected side 2-5 seconds slower than unaffected side less than 2 seconds difference	0	1	2
Total D (max 6)				

TOTAL A-D (max 66)				
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TABEL DATA PRIMER

No	nama pasien/Usia	jenis kelamin		Usia	CIMT/NON CIMT		Skor FM	Skor FM 2	Selisih skor FM	haemiparese		pendidikan		onset
		Kategori	kode		Kode	Kategori				Kategori	kode	pendidikan	kode	
1	ahmad moha	L	1	52	CIMT	1	30	54	24	dextra	1	S1	4	21
2	Sunarti	P	2	62	CIMT	1	42	53	11	sinistra	2	sm	2	17
3	Siti Aisyah	P	2	64	CIMT	1	36	54	18	sinistra	2	SMP	2	21
4	Nurdin	L	1	62	CIMT	1	40	56	16	dextra	1	s1	4	60
5	Hasni Akib	P	2	64	CIMT	1	41	51	10	dextra	1	sma	3	30
6	Rosdiati	P	2	60	CIMT	1	27	47	20	dextra	1	sma	3	32
7	Muriati Intan	P	2	40	CIMT	1	36	49	13	dextra	1	sma	3	65
8	mantasia	P	2	60	CIMT	1	37	49	12	dextra	1	sd	1	43
9	johari	P	2	63	CIMT	1	33	53	20	sinistra	2	sma	3	23
10	kata Tanna	L	1	58	CIMT	1	36	45	9	dextra	1	s1	4	56
11	Hasbi	L	1	563	CIMT	1	39	58	19	dextra	1	s3	6	15
12	Kursia	P	2	59	CIMT	1	37	50	13	sinistra	2	sma	3	14
13	Khalid	L	1	67	CIMT	1	34	51	17	sinistra	2	s1	4	36
14	hariaty	P	2	67	CIMT	1	39	49	10	sinistra	2	sma	3	10
15	Nirwansyah	L	1	48	CIMT	1	43	55	12	dextra	1	sma	3	21
16	Nurlia	P	2	52	CIMT	1	38	54	16	sinistra	2	sma	3	23
17	mantasia	P	2	64	NON CIMT	2	41	49	8	dextra	1	sma	3	18
18	Tini	P	2	69	NON CIMT	2	31	43	12	sinistra	2	sm	2	11
19	Sirajuddin	L	1	51	NON CIMT	2	38	46	8	dextra	1	sma	3	55
20	risnawati	P	2	43	NON CIMT	2	39	49	10	sinistra	2	sma	3	15
21	Sulaeman	L	1	54	NON CIMT	2	37	45	8	sinistra	2	sma	3	63
22	Arsyad	L	1	60	NON CIMT	2	32	45	13	dextra	1	s2	5	21
23	Yetno	L	1	69	NON CIMT	2	41	51	10	sinistra	2	sm	2	9
24	masrawati	P	2	38	NON CIMT	2	27	39	12	dextra	1	s1	4	23
25	Ismail	L	1	34	NON CIMT	2	31	39	8	sinistra	2	s1	4	17
26	Darwis	L	1	60	NON CIMT	2	39	49	10	sinistra	2	sma	3	23
27	petrus	L	1	43	NON CIMT	2	32	44	12	dextra	1	sma	3	14
28	Hasniah	P	2	56	NON CIMT	2	49	56	7	dextra	1	sma	3	28
29	Muhtasyam	L	1	64	NON CIMT	2	34	44	10	sinistra	2	sma	3	59
30	Suniati	P	2	43	NON CIMT	2	41	50	9	sinistra	2	sm	2	9
31	mince	P	2	66	NON CIMT	2	42	50	8	sinistra	2	s1	4	35
32	sutrisno	L	1	69	NON CIMT	2	39	47	8	dextra	1	s1	4	37
	Nurhaeda	P	2	64	NON CIMT	2	meninggal dunia			sinistra	2	sm	2	34

ANALISIS STATISTIK

Frequency Table

		Statistics			
		Hemiparese CIMT	Hemiparese Non CIMT	Pendidikan CIMT	Pendidikan Non CIMT
N	Valid	16	16	16	16
	Missing	16	16	16	16

Hemiparese CIMT

		Frequency	Valid Percent	Cumulative Percent
Valid	Dextra	9	56.3	56.3
	Sinistra	7	43.8	100.0
	Total	16	100.0	

Hemiparese Non CIMT

		Frequency	Valid Percent	Cumulative Percent
Valid	Dextra	7	43.8	43.8
	Sinistra	9	56.3	100.0
	Total	16	100.0	

Pendidikan CIMT

		Frequency	Valid Percent	Cumulative Percent
Valid	SD	1	6.3	6.3
	SMP	2	12.5	18.8
	SMA	8	50.0	68.8
	S1	4	25.0	93.8
	S3	1	6.3	100.0

Total	16	100.0
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Pendidikan Non CIMT

		Frequency	Valid Percent	Cumulative Percent
Valid	SMP	3	18.8	18.8
	SMA	8	50.0	68.8
	S1	4	25.0	93.8
	S2	1	6.3	100.0
	Total	16	100.0	

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Onset Kelompok CIMT	16	10	65	30.44	17.123
Onset Kelompok Non CIMT	16	9	63	27.31	17.764
Valid N (listwise)	16				

LAMPIRAN 2

UJI STATISTIK UNIVARIAT

Frequencies

Notes

Output Created		06-SEP-2022 21:32:12
Comments		
Input	Data	C:\Users\ASUS\Downloads\CIMT\input uji komparatif.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data.

Syntax	FREQUENCIES VARIABLES=JK_CIMT JK_Non_CIMT /ORDER=ANALYSIS.	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.02

Statistics

		Jenis Kelamin CIMT	Jenis Kelamin Non CIMT
N	Valid	16	16
	Missing	16	16

Frequency Table

Jenis Kelamin CIMT

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Laki-laki	6	18.8	37.5	37.5
	Perempuan	10	31.3	62.5	100.0
	Total	16	50.0	100.0	
Missing	System	16	50.0		
Total		32	100.0		

Jenis Kelamin Non CIMT

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Laki-laki	9	28.1	56.3	56.3
	Perempuan	7	21.9	43.8	100.0
	Total	16	50.0	100.0	
Missing	System	16	50.0		
Total		32	100.0		

Descriptives

Notes

Output Created		06-SEP-2022 21:32:31
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	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	32
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	All non-missing data are used.
Syntax		DESCRIPTIVES VARIABLES=Usia_CIMT Usia_Non_CIMT /STATISTICS=MEAN STDDEV MIN MAX.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Usia Kelompok CIMT	16	40	67	58.81	7.350
Usia Kelompok Non CIMT	16	34	69	55.19	11.833
Valid N (listwise)	16				

LAMPIRAN 3

LAMPIRAN HASIL UJI STATISTIK BIVARIAT (KOMPARATIF)

T-Test

Notes		
Output Created		06-SEP-2022 21:32:44
Comments		
Input	Data	C:\Users\ASUS\Downloads\CIMT\input uji komparatif.sav

	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	32
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on the cases with no missing or out-of-range data for any variable in the analysis.
Syntax		T-TEST PAIRS=Pre_CIMT Pre_Non_CIMT WITH Post_CIMT Post_Non_CIMT (PAIRED) /CRITERIA=CI(.9500) /MISSING=ANALYSIS.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.00

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre CIMT	36.75	16	4.250	1.063
	Post CIMT	51.75	16	3.474	.868
Pair 2	Pre Non-CIMT	37.06	16	5.543	1.386
	Post Non-CIMT	46.63	16	4.440	1.110

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Pre CIMT & Post CIMT	16	.366	.164
Pair 2	Pre Non-CIMT & Post Non-CIMT	16	.954	.000

LAMPIRAN 4 HASL UJI NORMALITAS

NEW FILE.

DATASET NAME DataSet1 WINDOW=FRONT.

EXAMINE VARIABLES=Pre_FM Post_FM Selisih_FM BY Kelompok

/PLOT BOXPLOT STEMLEAF NPLOT

/COMPARE GROUPS

/STATISTICS DESCRIPTIVES

/CINTERVAL 95

/MISSING LISTWISE

/NOTOTAL.

Explore

		Notes
Output Created		06-SEP-2022 15:54:15
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	32
Missing Value Handling	Definition of Missing	User-defined missing values for dependent variables are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any dependent variable or factor used.
Syntax		EXAMINE VARIABLES=Pre_FM Post_FM Selisih_FM BY Kelompok /PLOT BOXPLOT STEMLEAF NPLOT /COMPARE GROUPS /STATISTICS DESCRIPTIVES /CINTERVAL 95 /MISSING LISTWISE /NOTOTAL.
Resources	Processor Time	00:00:03.64
	Elapsed Time	00:00:02.23

Kelompok Intervensi

Case Processing Summary

	Kelompok Intervensi	Cases				
		Valid		Missing		Total
		N	Percent	N	Percent	N
Skor FM Pre-test	CIMT	16	100.0%	0	0.0%	16
	Non CIMT	16	100.0%	0	0.0%	16
Skor FM Post-test	CIMT	16	100.0%	0	0.0%	16
	Non CIMT	16	100.0%	0	0.0%	16
Selisih Skor FM	CIMT	16	100.0%	0	0.0%	16
	Non CIMT	16	100.0%	0	0.0%	16

Descriptives

Kelompok Intervensi		Statistic	Std. Error		
Skor FM Pre-test	CIMT	Mean	36.75	1.063	
		95% Confidence Interval for Mean	Lower Bound	34.49	
			Upper Bound	39.01	
		5% Trimmed Mean		36.94	
		Median		37.00	
		Variance		18.067	
		Std. Deviation		4.250	
		Minimum		27	
		Maximum		43	
		Range		16	
		Interquartile Range		5	
		Skewness		-.778	.564
		Kurtosis		.609	1.091
		Non CIMT	Non CIMT	Mean	37.06
95% Confidence Interval for Mean	Lower Bound			34.11	
	Upper Bound			40.02	
5% Trimmed Mean				36.96	
Median				38.50	
Variance				30.729	
Std. Deviation				5.543	
Minimum				27	
Maximum				49	
Range				22	
Interquartile Range				9	

		Skewness	.123	.564			
		Kurtosis	.092	1.091			
Skor FM Post-test	CIMT	Mean	51.75	.868			
		95% Confidence Interval for Mean	Lower Bound	49.90			
			Upper Bound	53.60			
		5% Trimmed Mean	51.78				
		Median	52.00				
		Variance	12.067				
		Std. Deviation	3.474				
		Minimum	45				
		Maximum	58				
		Range	13				
		Interquartile Range	5				
		Skewness	-.164	.564			
		Kurtosis	-.416	1.091			
		Non CIMT	Non CIMT	Mean	46.63	1.110	
				95% Confidence Interval for Mean	Lower Bound	44.26	
					Upper Bound	48.99	
				5% Trimmed Mean	46.53		
Median	46.50						
Variance	19.717						
Std. Deviation	4.440						
Minimum	39						
Maximum	56						
Range	17						
Interquartile Range	6						
Skewness	.040			.564			
Kurtosis	.261			1.091			
Selisih Skor FM	CIMT			Mean	15.00	1.099	
				95% Confidence Interval for Mean	Lower Bound	12.66	
					Upper Bound	17.34	
				5% Trimmed Mean	14.83		
		Median	14.50				
		Variance	19.333				
		Std. Deviation	4.397				
		Minimum	9				
		Maximum	24				
		Range	15				
		Interquartile Range	8				
		Skewness	.430	.564			

	Kurtosis		- .733	1.091
Non CIMT	Mean		9.56	.465
	95% Confidence Interval for Mean	Lower Bound	8.57	
		Upper Bound	10.55	
	5% Trimmed Mean		9.51	
	Median		9.50	
	Variance		3.463	
	Std. Deviation		1.861	
	Minimum		7	
	Maximum		13	
	Range		6	
	Interquartile Range		4	
	Skewness		.526	.564
	Kurtosis		-1.011	1.091

Tests of Normality

	Kelompok Intervensi	Kolmogorov-Smirnov ^a			Shapiro-Wilk	
		Statistic	df	Sig.	Statistic	df
Skor FM Pre-test	CIMT	.180	16	.175	.953	16
	Non CIMT	.137	16	.200 [*]	.952	16
Skor FM Post-test	CIMT	.141	16	.200 [*]	.977	16
	Non CIMT	.141	16	.200 [*]	.961	16
Selisih Skor FM	CIMT	.175	16	.200 [*]	.945	16
	Non CIMT	.237	16	.017	.880	16

Paired Samples Test

		Paired Differences				
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference	
					Lower	Upper
Pair 1	Pre CIMT - Post CIMT	-15.000	4.397	1.099	-17.343	-12.657
Pair 2	Pre Non-CIMT - Post Non-CIMT	-9.562	1.861	.465	-10.554	-8.571

T-TEST GROUPS=Kelompok(1 2)
 /MISSING=ANALYSIS
 /VARIABLES=Selisih_CIMT
 /CRITERIA=CI(.95).

T-Test

Notes

Output Created		06-SEP-2022 21:33:15
Comments		
Input	Data	C:\Users\ASUS\Downloads\CIMT <input komparatif.sav<="" td="" uji=""/>
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	32
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on the cases with no missing or out-of-range data for any variable in the analysis.
Syntax		T-TEST GROUPS=Kelompok(1 2) /MISSING=ANALYSIS /VARIABLES=Selisih_CIMT /CRITERIA=CI(.95).
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

Group Statistics

Kelompok intervensi		N	Mean	Std. Deviation	Std. Error Mean
Selisih skor FMA-UA	CIMT	16	15.00	4.397	1.099
Kelompok CIMT	Non-CIMT	16	9.56	1.861	.465

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means			95% confidence interval of the difference
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference
Selisih skor FMA-UA Kelompok CIMT	Equal variances assumed	14.747	.001	4.555	30	.000	5.438
	Equal variances not assumed			4.555	20.206	.000	5.438
							3.000
							2.949

Frequency Table

Statistics

		Hemiparese CIMT	Hemiparese Non CIMT	Pendidikan CIMT	Pendidikan Non CIMT
N	Valid	16	16	16	16
	Missing	16	16	16	16

Hemiparese CIMT

		Frequency	Valid Percent	Cumulative Percent
Valid	Dextra	9	56.3	56.3
	Sinistra	7	43.8	100.0
	Total	16	100.0	

Hemiparese Non CIMT

		Frequency	Valid Percent	Cumulative Percent
Valid	Dextra	7	43.8	43.8
	Sinistra	9	56.3	100.0
	Total	16	100.0	

Pendidikan CIMT

		Frequency	Valid Percent	Cumulative Percent
Valid	SD	1	6.3	6.3
	SMP	2	12.5	18.8
	SMA	8	50.0	68.8
	S1	4	25.0	93.8
	S3	1	6.3	100.0
	Total	16	100.0	

Pendidikan Non CIMT

		Frequency	Valid Percent	Cumulative Percent
Valid	SMP	3	18.8	18.8
	SMA	8	50.0	68.8
	S1	4	25.0	93.8
	S2	1	6.3	100.0
	Total	16	100.0	

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Onset Kelompok CIMT	16	10	65	30.44	17.123
Onset Kelompok Non CIMT	16	9	63	27.31	17.764
Valid N (listwise)	16				



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KOMITE ETIK PENELITIAN KESEHATAN
RSPTN UNIVERSITAS HASANUDDIN
RSUP Dr. WAHIDIN SUDIROHUSODO MAKASSAR



Sekretariat : Lantai 2 Gedung Laboratorium Terpadu
JL.PERINTIS KEMERDEKAAN KAMPUS TAMALANREA KM.10 MAKASSAR 90245.

Contact Person: dr. Agussalim Bukhari.,MMed,PhD, SpGK TELP. 081241850858, 0411 5780103, Fax : 0411-1431

LAMPIRAN 1

FORMULIR PERSETUJUAN SETELAH PENJELASAN (PSP) (INFORMED CONSENT)

Selamat pagi Bapak/Ibu, Assalamualaikum Warahmatullahi Wabarakatuh. Perkenalkansaya dr. Akbar Mandala dari Departemen Ilmu Penyakit Saraf Fakultas Kedokteran UNHAS, yang berencana akan melakukan penelitian untuk mengetahui Perbandingan pengaruh *constraint induced movement therapy* disertai terapi standar dengan kelompok kontrol terapi standar terhadap fungsi motorik ekstremitas atas pada pasien stroke iskemik.

Constraint-Induced Movement Therapy (CIMT) adalah teknik yang bertujuan untuk mengintegrasikan kembali lengan yang terkena dalam kinerja Aktivitas Kehidupan Sehari-hari (ADLs) dan mengurangi *non-use learned*. Untuk mencapai tujuan ini, CIMT mengusulkan untuk membatasi pergerakan lengan pasien yang kurang terpengaruh selama sekitar 90% dari jam bangun pasien, yang secara fisik memaksa penggunaan lengan yang terkena selama kinerja ADL. Pada saat pemeriksaan dan terapi CIMT akan dilakukan oleh saya sendiri sebagai peneliti dan penelitian ini tidak dipungut biaya, karena biaya ditanggung oleh peneliti. Terlebih dahulu, Kami akan mencatat identitas Bapak/Ibu (nama, alamat, umur, jenis kelamin, pekerjaan, riwayat penyakit sebelumnya), lalu melakukan tanya jawab mengenai penyakit lalu melakukan pemeriksaan fisik neurologik dan pemeriksaan

skrining awal Fugl Mayer, untuk menentukan kemampuan motorik awal pada pasien stroke iskemik.

Kemudian kita akan menggolongkan pasien yang akan mendapatkan terapi standar dikombinasikan dengan CIMT(kelompok perlakuan) dan pasien yang hanya mendapatkan terapi standar saja (kelompok kontrol). Selanjutnya Jika pasien mendapatkan terapi CIMT (*constraint induced movement therapy*) yaitu tindakan latihan fisik dengan cara melatih anggota gerak atas /lengan yang mengalami kelemahan. Latihan fisik tersebut berupa latihan fisik sederhana seperti memindahkan bola/kelereng ke satu wadah yang lain, latihan memasukkan koin kedalam celengan, memindahkan air dari gelas 1 ke gelas yang lain secara berulang-ulang, latihan memutar mur pada baut, latihan menjepit kertas dan latihan-latihan sederhana lainnya, sedangkan pada kelompok kontrol kita tidak melakukan prosedur CIMT pada pasien, peneliti hanya mengobservasi perkembangan pasien yang mendapatkan terapi standar stroke dan fisioterapi. Prosedur CIMT dilakukan setiap hari terapi selama \pm 30 menit - 1 jam dengan didampingi oleh saya sebagai peneliti kemudian akan dilakukan penilaian ulang terhadap fungsi motorik pasien dengan menggunakan Skor Fugl Meyer Upper Extremity (FMA UE) Latihan dan pengamatan akan dilakukan selama 2 minggu, pada kedua kelompok. Sarung tangan atau *padding* dipakai selama 90% dari jam terjaga (*waking hours*) selama 14 hari. Tiap hari partisipan melakukan latihan adaptif dan repetitif untuk tugas-tugas tertentu seperti perawatan diri, makan, dsb.

Pada saat pelaksanaan prosedur CIMT dapat terjadi efek samping seperti abrasi atau luka lecet minor pada kulit, spasme otot dan rasa tidak nyaman pada tempat pemasangan alat *constrain*.

Kami akan mencatat dan mengolah semua data yang sudah kami peroleh, hasil dari pengolahan data akan kami tampilkan di jurnal ilmiah tanpa membuka informasi data pribadi subyek penelitian. Kerahasiaan data dijamin dan hanya diketahui oleh peneliti dan komisi etik. Hasil penelitian ini diharapkan dapat menjadi pengetahuan baru untuk meningkatkan mutu dan kualitas pengobatan stroke iskemik, sehingga didapatkan angka kecacatan yang rendah, kualitas hidup yang lebih baik, dan fungsi kognitif yang lebih baik pada penderita stroke iskemik. Keikutsertaan Bapak/Ibu dalam penelitian ini bersifat sukarela tanpa paksaan, karena itu bila Bapak/Ibu menolak ikut atau berhenti ikut pada penelitian ini tidak akan mengurangi atau kehilangan hak untuk mendapatkan pelayanan kesehatan standar rutin sesuai dengan penyakit yang Bapak/Ibu derita serta mendapat obat yang diperlukan. Bila masih ada hal-hal yang ingin bapak/Ibu ketahui, atau masih ada hal-hal yang belum jelas, maka Bapak/Ibu bisa bertanya dan meminta penjelasan kami di Poliklinik Saraf Departemen Ilmu penyakit Saraf RSUP dr. Wahidin Sudirohusodo Makassar, atau secara langsung melalui No. HP peneliti : 085242940403. Demikian penjelasan saya, jika Bapak/Ibu bersedia untuk berpartisipasi, diharapkan menandatangani surat persetujuan mengikuti penelitian. Atas kesediaan dan kerjasamanya diucapkan terima kasih

Identitas Peneliti

Nama : dr. Akbar Mandala

Alamat : Jalan Racing Center Komp PLN No 9 , Makassar

No Hp : 085242940403



KEMENTERIAN PENDIDIKAN DAN KEBUDAYAAN
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Sekretariat : Lantai 2 Gedung Laboratorium Terpadu
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Contact Person: dr. Agussalim Bukhari.,MMed,PhD, SpGK TELP. 081241850858, 0411 5780103, Fax : 0411-581431

FORMULIR PERSETUJUAN SETELAH PENJELASAN

Saya yang bertandatangan di bawah ini :

Nama :
 Umur :
 Masa Kerja :
 Satuan :
 Alamat :

.....

setelah mendengar/membaca dan mengerti penjelasan yang diberikan mengenai tujuan, manfaat, dan apa yang akan dilakukan pada penelitian ini, menyatakan setuju untuk ikut dalam penelitian ini secara sukarela tanpa paksaan.

Saya tahu bahwa keikutsertaan saya ini bersifat sukarela tanpa paksaan, sehingga saya bisa menolak ikut atau mengundurkan diri dari penelitian ini. Saya berhak bertanya atau meminta penjelasan pada peneliti bila masih ada hal yang belum jelas atau masih ada hal yang ingin saya ketahui tentang penelitian ini.

Saya juga mengerti bahwa semua biaya yang dikeluarkan sehubungan dengan penelitian ini, akan ditanggung oleh peneliti. Saya percaya bahwa keamanan dan kerahasiaan data penelitian akan terjamin dan saya dengan ini menyetujui semua data saya yang dihasilkan pada penelitian ini untuk disajikan dalam bentuk lisan maupun tulisan.

Dengan membubuhkan tandatangan saya di bawah ini, saya menegaskan keikutsertaan saya secara sukarela dalam studi penelitian ini.

Nama

Tanda tangan

Tgl/Bln/Thn

Responden

.....

.....

/Wali

Saksi

.....

.....

(Tanda Tangan Saksi diperlukan hanya jika Partisipan tidak dapat memberikan consent/persetujuan sehingga menggunakan wali yang sah secara hukum, yaitu untuk partisipan berikut:

1. Penderita stroke iskemik dengan onset \leq 90 hari serangan pertama
2. Kekuatan motorik \geq 4
3. Berusia 35 sampai 70 tahun
4. Menyatakan tidak berkeberatan disertakan dalam penelitian dengan menandatangani surat pernyataan persetujuan oleh penderita/ wali penderita.
5. Pasien iskemik serangan pertama.

Penanggung jawab penelitian :
dr. Akbar Mandala

Jl Racing Center Komp PLN No 9

Hp : 0852-4294-0403

Penanggung jawab Medis :
Dr. dr. David Gunawan Umbas, Sp.S (K)

Jl. Hertasning Baru Perum Anging
Mammiri Blok D5 no. 5-6

Hp : 0812-4118-3290





REKOMENDASI PERSETUJUAN ETIK

Nomor : 568/UN4.6.4.5.31/ PP36/ 2022

Tanggal: 6 Oktober 2022

Dengan ini Menyatakan bahwa Protokol dan Dokumen yang Berhubungan Dengan Protokol berikut ini telah mendapatkan Persetujuan Etik :

No Protokol	UH22070388	No Sponsor Protokol	
Peneliti Utama	dr. Akbar Mandala	Sponsor	
Judul Peneliti	PERBANDINGAN PENGARUH CONSTRAINT INDUCED MOVEMENT THERAPY DISERTAI TERAPI STANDAR DENGAN KELOMPOK KONTROL TERAPI STANDAR TERHADAP FUNGSI MOTORIK EKSTREMITAS ATAS PADA PASIEN STROKE ISKEMIK		
No Versi Protokol	2	Tanggal Versi	28 September 2022
No Versi PSP	2	Tanggal Versi	28 September 2022
Tempat Penelitian	RSUP Dr. Wahidin Sudirohusodo Makassar		
Jenis Review	<input type="checkbox"/> Exempted <input checked="" type="checkbox"/> Expedited <input type="checkbox"/> Fullboard Tanggal	Masa Berlaku 6 Oktober 2022 sampai 6 Oktober 2023	Frekuensi review lanjutan
Ketua KEP Universitas Hasanuddin	Nama Prof.Dr.dr. Suryani As'ad, M.Sc.,Sp.GK (K)	Tanda tangan 	
Sekretaris KEP Universitas Hasanuddin	Nama dr. Agussalim Bukhari, M.Med.,Ph.D.,Sp.GK (K)	Tanda tangan 	

Kewajiban Peneliti Utama:

- Menyerahkan Amandemen Protokol untuk persetujuan sebelum di implementasikan
- Menyerahkan Laporan SAE ke Komisi Etik dalam 24 Jam dan dilengkapi dalam 7 hari dan Laporan SUSAR dalam 72 Jam setelah Peneliti Utama menerima laporan
- Menyerahkan Laporan Kemajuan (progress report) setiap 6 bulan untuk penelitian resiko tinggi dan setiap setahun untuk penelitian resiko rendah
- Menyerahkan laporan akhir setelah Penelitian berakhir
- Melaporkan penyimpangan dari protokol yang disetujui (protocol deviation / violation)
- Mematuhi semua peraturan yang ditentukan