

**The Effectiveness of Fixed Dose Combination of
Alpha Lipoic Acid and Vitamin B Preparation
for Treatment of Diabetic Polyneuropathy in
Type 2 diabetes mellitus patients : A
randomized placebo-controlled trial.**

DATE: 31ST MARCH 2024

APPENDIX I: Case report form

DATE : _____

ID: _____

Name: _____

IC: _____

RN: _____

A. BASELINE VISIT

Research topic: The Effectiveness of Fixed Dose Combination of Alpha Lipoic Acid and Vitamin B Preparations for Treatment of Diabetic Polyneuropathy in Type 2 diabetes mellitus patients: A randomized placebo-controlled trial




SECTION A:

**SCREENING CRITERIA FOR ELIGIBILITY TO PARTICIPATE IN THE STUDY
USING NEUROLOGICAL SYMPTOM SCORE (NSS) AND NEUROPATHY
DISABILITY SCORE (NDS) QUESTIONS**

(Questions and examination of diabetic polyneuropathy will be done by trained research supervisors)

Neuropathy Symptom Score (NSS) and Neuropathy Disability Score (NDS)

Symptoms		
Burning, numbness, tingling	2	
Fatigue, cramping, aching	1	
None	0	
Location		
Feet	2	
Calves	1	
Elsewhere	0	
Timing of symptoms		
Nocturnal exacerbation	2	
Present during day and night	1	
Present during the day only	0	
Symptoms wake patient up from sleep	1	
Manoeuvres to reduce symptoms		
Walking	2	
Standing	1	
Sitting/Lying	0	
NSS score		

Signs	Right	Left
Vibration (128 Hz tuning fork at the hallux of the big toe) 		
Absent/reduced	1	1
Present	0	0
Temperature (tip of cold tuning fork at dorsum of the foot-above medial malleolus) 		
Absent/reduced	1	1
Present	0	0
Pin-prick (apply pin at proximal end of big toenail to distinguish sharp/blunt) 		
Absent/reduced	1	1
Present	0	0
Ankle reflex		
Absent	2	2
Present only with re-enforcement	1	1
Present	0	0
Total NDS		

Symptoms: Mild (NSS 3-4), Moderate (NSS 5-6), Severe (NSS 7-9)

Signs: Mild (NDS 3-5), Moderate (NDS 6-8), Severe (9-10)

The minimum acceptable criteria for a diagnosis of peripheral neuropathy were:

- 1. Presence of moderate signs (NDS >6) regardless of symptoms OR**
- 2. Mild signs (NDS > 3) with moderate symptoms (NSS > 5)**

SECTION B

Research topic: The Effectiveness of Fixed Dose Combination of Alpha Lipoic Acid and Vitamin B Preparations for Treatment of Diabetic Polyneuropathy in Type 2 diabetes mellitus patients: A randomized placebo-controlled trial

B1: PARTICIPANT BACKGROUND

Please mark (✓) the appropriate answer

1.	Gender	<input type="checkbox"/> Male <input type="checkbox"/> Female
2.	Age	
3.	Race	<input type="checkbox"/> Malay <input type="checkbox"/> Chinese <input type="checkbox"/> Indian <input type="checkbox"/> Siamese <input type="checkbox"/> Others Please state
4.	Level of Education	<input type="checkbox"/> Not going to school <input type="checkbox"/> Elementary School <input type="checkbox"/> High School <input type="checkbox"/> University
5.	Jobs	<input type="checkbox"/> Working <input type="checkbox"/> Not Working
6.	Monthly income	RM _____
7.	Marriage status	<input type="checkbox"/> Single <input type="checkbox"/> Married

B2: HEALTH INFORMATION AND DIABETES INFORMATION (To be filled in by the researcher)

1.	How long have you had diabetes?	Years
2.	Diabetes medication	<input type="checkbox"/> Metformin <input type="checkbox"/> Gliclazide <input type="checkbox"/> SGLT-2 <input type="checkbox"/> DPP4 inhibitor <input type="checkbox"/> Insulin <input type="checkbox"/> Others: Please state: _____
4.	Do you have high blood pressure?	<input type="checkbox"/> Yes <input type="checkbox"/> No
5.	Do you have high cholesterol?	<input type="checkbox"/> Yes <input type="checkbox"/> No
6.	Retinopathy	<input type="checkbox"/> Yes <input type="checkbox"/> No
7.	Ischemic Heart Disease/Myocardial Infarction	<input type="checkbox"/> Yes <input type="checkbox"/> No
8.	Other diseases: Specify	
9.	History of allergy to medication	<input type="checkbox"/> Yes <input type="checkbox"/> No

B3: Total symptoms score (TSS)

Please mark (✓) the appropriate answer

Neuropathic symptoms	Symptoms frequency	Symptom intensity			
		Absent	Slight	Moderate	Severe
1. Stabbing Pain	Occasional	0	1.00	2.00	3.00
	Frequent	0	1.33	2.33	3.33
	Almost continues	0	1.66	2.66	3.66

Neuropathic symptoms	Symptoms frequency	Symptom intensity			
		Absent	Slight	Moderate	Severe
2.Burning pain	Occasional	0	1.00	2.00	3.00
	Frequent	0	1.33	2.33	3.33
	Almost continues	0	1.66	2.66	3.66

Neuropathic symptoms	Symptoms frequency	Symptom intensity			
		Absent	Slight	Moderate	Severe
3.Paraesthesia	Occasional	0	1.00	2.00	3.00
	Frequent	0	1.33	2.33	3.33
	Almost continues	0	1.66	2.66	3.66

Neuropathic symptoms	Symptoms frequency	Symptom intensity			
		Absent	Slight	Moderate	Severe
4.Numbness	Occasional	0	1.00	2.00	3.00
	Frequent	0	1.33	2.33	3.33
	Almost continues	0	1.66	2.66	3.66

Symptom frequency	Symptom intensity			
	Absent	Slight	Moderate	Severe
Occasional	0	1.00	2.00	3.00
Frequent	0	1.33	2.33	3.33
(Almost) continuous	0	1.66	2.66	3.66

B4: The revised version of Diabetes Quality of Life (RV-DQoL) questionnaire

Please read each statement carefully and mark the number that best suits you.

Satisfaction Domain	Very satisfied	Moderately satisfied	Neither satisfied nor dissatisfied	Moderately dissatisfied	Very dissatisfied
1. How satisfied are you with the amount of time it takes to manage your diabetes?	1	2	3	4	5
2. How satisfied are you with the amount of time you spend getting checkups?	1	2	3	4	5
3. How satisfied are you with the time it takes to determine your sugar level?	1	2	3	4	5
4. How satisfied are you with your current treatment?	1	2	3	4	5

5. How satisfied are you with your knowledge about your diabetes?

1

2

3

4

5

6. How satisfied are you with life in general?

1

2

3

4

5

Impact Domain	Never	Sometimes	Often	Frequently	Always
1. How often do you feel pain associated with the treatment for your diabetes?	1	2	3	4	5
2. How often do you feel physically ill?	1	2	3	4	5
3. How often does your diabetes interfere with your family life?	1	2	3	4	5
4. How often do you find your diabetes limiting your social relationships and friendships?	1	2	3	4	5

Worry Domain	Never	Sometimes	Often	Frequently	Always
1. How often do you worry about whether you will pass out?	1	2	3	4	5
2. How often do you worry that your body looks different because you have diabetes?	1	2	3	4	5
3. How often do your worry that you will get complications from your diabetes?	1	2	3	4	5

B5: Clinical data

1	body mass index (BMI) Weight: Height:	_____ kg/m ²
2	Blood Pressure	_____ mmHg

B6: Blood test results at the first visit

Blood Test	Result
FBS (mmol/L)	
HbA1c (%)	
TC (mmol/L)	
LDL (mmol/L)	
HDL (mmol/L)	
TG (mmol/L)	
Creatinine	
Urea	
AST	
ALT	
ALP	

B. SECOND VISIT (6 WEEKS)

DATE : _____ ID: _____

Research topic: The Effectiveness of Fixed Dose Combination of Alpha Lipoic Acid and Vitamin B Preparations for Treatment of Diabetic Polyneuropathy in Type 2 diabetes mellitus patients: A randomized placebo-controlled trial

Name: _____

IC: _____

RN: _____

1. Total symptoms score (TSS)

Please mark (✓) the appropriate answer

Neuropathic symptoms	Symptoms frequency	Symptom intensity			
		Absent	Slight	Moderate	Severe
1. Stabbing Pain	Occasional	0	1.00	2.00	3.00
	Frequent	0	1.33	2.33	3.33
	Almost continues	0	1.66	2.66	3.66

Neuropathic symptoms	Symptoms frequency	Symptom intensity			
		Absent	Slight	Moderate	Severe
2. Burning pain	Occasional	0	1.00	2.00	3.00
	Frequent	0	1.33	2.33	3.33
	Almost continues	0	1.66	2.66	3.66

Neuropathic symptoms	Symptoms frequency	Symptom intensity			
		Absent	Slight	Moderate	Severe
3. Paraesthesia	Occasional	0	1.00	2.00	3.00
	Frequent	0	1.33	2.33	3.33
	Almost continues	0	1.66	2.66	3.66

Neuropathic symptoms	Symptoms frequency	Symptom intensity			
		Absent	Slight	Moderate	Severe
4. Numbness	Occasional	0	1.00	2.00	3.00
	Frequent	0	1.33	2.33	3.33
	Almost continues	0	1.66	2.66	3.66

2. Neuropathy Symptom Score (NSS)

Symptoms		
Burning, numbness, tingling	2	
Fatigue, cramping, aching	1	
None	0	
Location		
Feet	2	
Calves	1	
Elsewhere	0	
Timing of symptoms		
Nocturnal exacerbation	2	
Present during day and night	1	
Present during the day only	0	
Symptoms wake patient up from sleep	1	
Manoeuvres to reduce symptoms		
Walking	2	
Standing	1	
Sitting/Lying	0	
NSS score		

B4: The revised version of Diabetes Quality of Life (RV-DQoL) questionnaire

Please read each statement carefully and mark the number that best suits you.

Satisfaction Domain	Very satisfied	Moderately satisfied	Neither satisfied nor dissatisfied	Moderately dissatisfied	Very dissatisfied
7. How satisfied are you with the amount of time it takes to manage your diabetes?	1	2	3	4	5
8. How satisfied are you with the amount of time you spend getting checkups?	1	2	3	4	5
9. How satisfied are you with the time it takes to determine your sugar level?	1	2	3	4	5
10. How satisfied are you with your current treatment?	1	2	3	4	5

11. How satisfied are you with your knowledge about your diabetes?

1

2

3

4

5

12. How satisfied are you with life in general?

1

2

3

4

5

Impact Domain	Never	Sometimes	Often	Frequently	Always
5. How often do you feel pain associated with the treatment for your diabetes?	1	2	3	4	5
6. How often do you feel physically ill?	1	2	3	4	5
7. How often does your diabetes interfere with your family life?	1	2	3	4	5
8. How often do you find your diabetes limiting your social relationships and friendships?	1	2	3	4	5

Worry Domain	Never	Sometimes	Often	Frequently	Always
4. How often do you worry about whether you will pass out?	1	2	3	4	5
5. How often do you worry that your body looks different because you have diabetes?	1	2	3	4	5
6. How often do your worry that you will get complications from your diabetes?	1	2	3	4	5

3. Clinical Data

1	Body mass index (BMI) Weight: Height:	_____ kg/m ²
2	Blood Pressure	_____ mmHg

4. Medication side effect:

☐ Yes

☐ No

State if applicable :

i. _____

5. Do you take medicine every day?

☐ Yes

☐ No

6. If you do not take medicine every day, state how often in a week you do not take medicine?

☐ Once a week

☐ 2-3 times a week

☐ More than 3 times a week

7. State the reason you are not taking medicine

☐ Forgot

☐ Side effects

☐ Others reasons - Specify

C. 3RD VISIT (12 WEEKS)

DATE : _____ ID: _____

Research topic: The Effectiveness of Fixed Dose Combination of Alpha Lipoic Acid and Vitamin B Preparations for Treatment of Diabetic Polyneuropathy in Type 2 diabetes mellitus patients: A randomized placebo-controlled trial

Name: _____

IC: _____

RN: _____

1. Total symptoms score (TSS)

Please mark (✓) the appropriate answer

Neuropathic symptoms	Symptoms frequency	Symptom intensity			
		Absent	Slight	Moderate	Severe
1. Stabbing Pain	Occasional	0	1.00	2.00	3.00
	Frequent	0	1.33	2.33	3.33
	Almost continues	0	1.66	2.66	3.66

Neuropathic symptoms	Symptoms frequency	Symptom intensity			
		Absent	Slight	Moderate	Severe
2. Burning pain	Occasional	0	1.00	2.00	3.00
	Frequent	0	1.33	2.33	3.33
	Almost continues	0	1.66	2.66	3.66

Neuropathic symptoms	Symptoms frequency	Symptom intensity			
		Absent	Slight	Moderate	Severe
3. Paraesthesia	Occasional	0	1.00	2.00	3.00
	Frequent	0	1.33	2.33	3.33
	Almost continues	0	1.66	2.66	3.66

Neuropathic symptoms	Symptoms frequency	Symptom intensity			
		Absent	Slight	Moderate	Severe
4. Numbness	Occasional	0	1.00	2.00	3.00
	Frequent	0	1.33	2.33	3.33
	Almost continues	0	1.66	2.66	3.66

2. Neuropathy Symptom Score (NSS)

Symptoms		
Burning, numbness, tingling	2	
Fatigue, cramping, aching	1	
None	0	
Location		
Feet	2	
Calves	1	
Elsewhere	0	
Timing of symptoms		
Nocturnal exacerbation	2	
Present during day and night	1	
Present during the day only	0	
Symptoms wake patient up from sleep	1	
Manoeuvres to reduce symptoms		
Walking	2	
Standing	1	
Sitting/Lying	0	
NSS score		

3. The revised version of Diabetes Quality of Life (RV-DQoL) questionnaire

Please read each statement carefully and mark the number that best suits you.

Satisfaction Domain	Very satisfied	Moderately satisfied	Neither satisfied nor dissatisfied	Moderately dissatisfied	Very dissatisfied
13. How satisfied are you with the amount of time it takes to manage your diabetes?	1	2	3	4	5
14. How satisfied are you with the amount of time you spend getting checkups?	1	2	3	4	5
15. How satisfied are you with the time it takes to determine your sugar level?	1	2	3	4	5
16. How satisfied are you with your current treatment?	1	2	3	4	5

17. How satisfied are you with your knowledge about your diabetes?

1

2

3

4

5

18. How satisfied are you with life in general?

1

2

3

4

5

Impact Domain	Never	Sometimes	Often	Frequently	Always
9. How often do you feel pain associated with the treatment for your diabetes?	1	2	3	4	5
10. How often do you feel physically ill?	1	2	3	4	5
11. How often does your diabetes interfere with your family life?	1	2	3	4	5
12. How often do you find your diabetes limiting your social relationships and friendships?	1	2	3	4	5

Worry Domain	Never	Sometimes	Often	Frequently	Always
7. How often do you worry about whether you will pass out?	1	2	3	4	5
8. How often do you worry that your body looks different because you have diabetes?	1	2	3	4	5
9. How often do you worry that you will get complications from your diabetes?	1	2	3	4	5

4. Clinical Data

1	Body mass index (BMI) Weight: Height:	_____ kg/m ²
2	Blood Pressure	_____ mmHg

5. Blood test results at the 3rd visit

Blood Test	Result
FBS (mmol/L)	
Hba1c (%)	
TC (mmol/L)	
LDL (mmol/L)	
HDL (mmol/L)	
TG (mmol/L)	
Creatinine	
Urea	
AST	
ALT	
ALP	

6. Medication side effect:

☐ Yes

☐ No

State if applicable :

i. _____

7. Do you take medicine every day?

☐ Yes

☐ No

8. If you do not take medicine every day, state how often in a week you do not take medicine?

☐ Once a week

☐ 2-3 times a week

☐ More than 3 times a week

9. State the reason you are not taking medicine

☐ Forgot

☐ Side effects

☐ Others reasons - Specify