

Comparison Between Magnetic Field and Laser Therapy in Management of Trigeminal Neuralgia

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Study record dates

These dates track the progress of study record and summary results submissions to ClinicalTrials.gov. Study records and reported results are reviewed by the National Library of Medicine (NLM) to make sure they meet specific quality control standards before being posted on the public website.

Study Registration Dates

| FIRST SUBMITTED | FIRST SUBMITTED THAT MET QC CRITERIA | FIRST POSTED |
|--|--------------------------------------|------------------|
| September 19, 2021 | September 29, 2021 | October 13, 2021 |
| Study Record Updates | | |
| LAST UPDATE SUBMITTED THAT MET QC CRITERIA | LAST UPDATE POSTED | LAST VERIFIED |
| March 11, 2022 | March 16, 2022 | March 2022 |

Study Tab

Study Overview

Brief Summary:

Trigeminal neuralgia (TN) was defined by The International Association for the Study of Pain (IASP) as severe, sudden, usually unilateral, stabbing, brief, recurrent attacks of pain in one or more distributional branches of the trigeminal nerve. The purpose of the current study will to investigate the effect of Low level laser therapy versus electromagnetic therapy on diabetic trigeminal neuralgia pain intensity and amplitude of the compound muscle action potential of the masseter and temporalis muscles in diabetic TN patients.

| OFFICIAL TITLE | | |
|---|----------------|----------------------------|
| Magnetic Field and Laser Therapy in Management of Diabetic Trigeminal Neuralgia | | |
| CONDITIONS | STUDY TYPE | ENROLLMENT (ACTUAL) |
| Trigeminal Neuralgia | Interventional | 120 |
| INTERVENTION / TREATMENT | PHASE | OTHER STUDY ID NUMBERS |
| Other: Electromagnetic therapy. | Not Applicable | magnetic and laser therapy |

Other: Low level laser therapy (LLLT)

STUDY START (ACTUAL)

October 15, 2021

PRIMARY COMPLETION (ACTUAL)

February 22, 2022

STUDY COMPLETION (ACTUAL)

February 23, 2022

Resource links provided by the National Library of Medicine

[MedlinePlus \(https://medlineplus.gov/\)](https://medlineplus.gov/) related topics: [Trigeminal Neuralgia \(https://medlineplus.gov/trigeminalneuralgia.html\)](https://medlineplus.gov/trigeminalneuralgia.html)

[Genetic and Rare Diseases Information Center \(https://rarediseases.info.nih.gov/gard\)](https://rarediseases.info.nih.gov/gard) resources:
[Trigeminal Neuralgia \(https://rarediseases.info.nih.gov/diseases/7805/trigeminal-neuralgia\)](https://rarediseases.info.nih.gov/diseases/7805/trigeminal-neuralgia)

[Other U.S. FDA Resources \(https://clinicaltrials.gov/ct2/info/fdalinks\)](https://clinicaltrials.gov/ct2/info/fdalinks)

Contacts and Locations

This section provides the contact details for those conducting the study, and information on where this study is being conducted.

Egypt

 **Cairo, Egypt**
AAA

Participation Criteria

Researchers look for people who fit a certain description, called [eligibility criteria](#). Some examples of these criteria are a person's general health condition or prior treatments.

For general information about clinical research, read [Learn About Studies \(https://beta.clinicaltrials.gov/about-studies\)](https://beta.clinicaltrials.gov/about-studies).

Eligibility Criteria

AGES ELIGIBLE FOR STUDY

25 Years to 45 Years (Adult)

ACCEPTS HEALTHY VOLUNTEERS

No

SEXES ELIGIBLE FOR STUDY

All

DESCRIPTION

Inclusion Criteria:

- All participants will between the ages of 25 and 45, will of both sexes (male and female), diabetic type two patients with chronic trigeminal neuralgia, (from three to six months).
- Patients will awake, cooperative, and free of psychiatric issues (as determined by a psychologist) as well as difficulties resulting from orthopaedic or special sensory deficits.

Exclusion Criteria:

- Patients will ruled out if they developed TN due to a tumour, herpes zoster, or any other reason other than diabetes, such as significant coagulation dysfunction, cardiopulmonary dysfunction or previous invasive treatment (ethanol, radiofrequency, Gamma-knife microvascular decompression, glycerinum injection).
- They will not have a previous disability in the face.

Study Plan

This section provides details of the study plan, including how the study is designed and what the study is measuring.

How is the study designed?

DESIGN DETAILS

Primary Purpose: Treatment
Allocation: Randomized
Interventional Model: Parallel Assignment
Masking: Single

NUMBER OF ARMS

3

ARMS AND INTERVENTIONS

| Participant Group/Arm | Intervention/Treatment |
|---|------------------------|
| No Intervention: control group Participants will receive the descriptive medication by neurologist | |
| | |

| | |
|--|--|
| <p>Experimental: electromagnetic group</p> <p>Participants will receive the descriptive medication by neurologist in addition to electromagnetic therapy.</p> <p>Electromagnetic therapy will be applied for 20 min/session for three days each week for two months.</p> | <p>Other: Electromagnetic therapy.</p> <p>Electromagnetic therapy will be applied for 20 min/ session for (3 days/ week for two months) to the group intervention.</p> |
| <p>Experimental: low laser therapy group</p> <p>Participants will receive the descriptive medication by neurologist in addition to low laser therapy. Low laser therapy will be applied for 20 min/session for three days each week for two months.</p> | <p>Other: Low level laser therapy (LLLT)</p> <p>Low level laser therapy (LLLT) will be applied for 20 min/session laser scanner for three days each week for two months to the group intervention.</p> |

What is the study measuring?

PRIMARY OUTCOME MEASURES

| Outcome Measure | Measure Description | Time Frame |
|---|---|-------------------------------|
| Studies using electromyography and complex muscle action potentials | All patients' compound motor action potential amplitudes in the masseter and temporalis muscles will be evaluated before interventions. | at the beginning of the study |

| | | |
|---|---|--|
| Studies using electromyography and complex muscle action potentials | All patients' compound motor action potential amplitudes in the masseter and temporalis muscles will be evaluated after two month of interventions. | by the end of successful two month of intervention |
| Visual analogue scale (VAS) | All the participants were instructed to express their pain by Visual analogue scale (VAS) before the interventions. | at the beginning of the study |
| Visual analogue scale (VAS) | All the participants were instructed to express their pain by Visual analogue scale (VAS) after two month of interventions. | by the end of successful two month of intervention |

Collaborators and Investigators

This is where you will find people and organizations involved with this study.

SPONSOR

Delta University for Science and Technology

COLLABORATORS

No information provided

INVESTIGATORS

No information provided

Publications

The person responsible for entering information about the study voluntarily provides these publications. These may be about anything related to the study.

GENERAL PUBLICATIONS

No publications available

* Find [Publications about Study Results](#) and related [Pubmed Publications](#) in the “Results” section of the study record.

More Information

Terms related to this study

ADDITIONAL RELEVANT MeSH TERMS

Peripheral Nervous System Diseases
Neuromuscular Diseases
Nervous System Diseases
Pain
Neurologic Manifestations
Trigeminal Nerve Diseases
Facial Neuralgia
Facial Nerve Diseases
Mouth Diseases
Stomatognathic Diseases
Cranial Nerve Diseases
Trigeminal Neuralgia
Neuralgia

Plan for Individual participant data (IPD)

PLAN TO SHARE INDIVIDUAL PARTICIPANT DATA (IPD)?

Yes

IPD PLAN DESCRIPTION

Individual participant data (IPD) will be available to other researchers after 12 month from publishing.

IPD SHARING TIME FRAME

After 12 month from publishing.

IPD SHARING SUPPORTING INFORMATION TYPE

Study Protocol

Statistical Analysis Plan (SAP)

Clinical Study Report (CSR)

Drug and device information, study documents, and helpful links

STUDIES A U.S. FDA-REGULATED DRUG PRODUCT

No

STUDIES A U.S. FDA-REGULATED DEVICE PRODUCT

No