Clinical Trial Protocol
Iranian Registry of Clinical Trials

17 Sep 2026

Relationship low level laser therapy on scar formation caused by Caesarean section.

Protocol summary

Summary

1) Introduction: According To Recent Scientific Advances Hypertrophic Scar Is Still One Of The Major Medical Problems And Prevention Is The Best Strategy To Address This Problem. Scars Can Have A Negative Effect On Quality Of Life And A Source Of Confusion Is Due To The Decline In Confidence. Very Few Treatment Options For Bhyvd Oscar Suggested That Including Radiotherapy, Cryotherapy And Local Injection Of Corticosteroid Which Has A High Relapse Rate Associated With. According To Recent Scientific Advances Hypertrophic Scar Is Still One Of The Major Medical Problems And Prevention Is The Best Strategy To Address This Problem. Therapeutic Use Of Low Level Laser Therapy (Low Level Laser Therapy) Or LLLT As A Safe Method Has Been Approved By The FDA. On The Basis Of This Study Was To Determine The Effect Of Low Level Laser Therapy On Scar Formation Caused By Caesarean Pay. 2) General Objectives: To Determine The Effect Of Low Level Laser Therapy On Scar Formation Caused By Caesarean Section 3) Study Population And Data Collection Methods: 62 Women Who Underwent Elective Cesarean Section In Amir Hospital In Semnan Obstetric Reasons Are, Continues. 4) How To Use The Results: The Results Of This Study Could Form The Effect Of Low Level Laser Therapy In The Prevention Of Hypertrophic Scars To Prove And Thus At High Risk Mothers Who Have Caesarean Scar Wounds Can Benefit From The Treatment Was.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2016011926099N1**
Registration date: **2016-02-07, 1394/11/18**
Registration timing: **registered_while_recruiting**

Last update:
Update count: **0**

Registration date

2016-02-07, 1394/11/18

Registrant information

Name
Elham Saffarieh
Name of organization / entity
Semnan University of Medical Sciences, Semnan, Iran
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Recruitment status

Recruitment complete

Funding source
Semnan University of Medical Sciences

Expected recruitment start date

2016-01-06, 1394/10/16

Expected recruitment end date

2016-10-22, 1395/08/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Relationship low level laser therapy on scar formation caused by Caesarean section.

Public title

Effect of low level laser therapy on scar formation after cesarean section.

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion Criteria: Age 17 To 34; Gestational Age Between 37 To 42 Weeks; No History Of Previous Cesarean; The Absence Of Any Obstetric Complications; Lack Of Diseases That Can Delay Wound Healing; No Drugs Affecting Wound Healing And Scar; No Previous Suprapubic Scar; The Lack Of A History Of Keloid; No Smoking Or Drugs. Exclusion Criteria: Duration Of Surgery> 90 Min; Any Complication Of Cesarean Section; Length Of Stay> 7 Days In The Hospital; Lack Of Consent For Continued Participation

Age

From **17 years** old to **37 years** old

Gender

Female

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **62**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Double blinded

Blinding description

Placebo

Not used

Assignment

Other

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Semnan University of Medical Sciences

Street address

Semnan University of Medical Sciences

City

semnan

Postal code

Approval date

2016-01-05, 1394/10/15

Ethics committee reference number

IR.SEMUMS.REC.1394.143

Health conditions studied

1

Description of health condition studied

Relationship low level laser therapy on scar formation caused by Caesarean section.

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description

The Incision Site

Timepoint

In The Experimental Group For 6 Days (24 Hours, 3, 5, 7, 9 And 11 Days After Cesarean Section)

Method of measurement

Mustang 2000 Machine Made In Russia, To Continuously Irradiated With Gaalas Diode Laser With A Wavelength Of 830 Nm (Infrared) At A Rate Of 4 Joules Per Square Centimeter And 620 Nm Wavelength (Red) By 4 Mj Cm Are Square. Angle Probe On The Skin Of 90 Degrees. In The Intervention Group And Control Group In The Same Conditions Laser Probe Placed On The Skin But No Laser Is Emitted. Since The Effect Of Low Level Laser On And Increase Mitochondrial Atp And Its Regenerative Effects Remain 24 To 72 Hours So We Distance Between The Laser Radiation Chose The Other Day. Resident Women In The Intervention Group Performed By Laser Irradiation And Safety Issues Are Fully Respected.

Secondary outcomes

1

Description

Oscar Thickness

Timepoint

6 Months

Method of measurement

Oscar the Surgical Site With the Vancouver Scar Sale Criterion Will be Assessed and Pain, Itching and Feeling Sick to the Scar Created by Visual Analog Scale Criteria is Evaluated. Photos of AutoCAD software in 2014 (AUTOCAD 2014) entered the area of the wound in the images and the thickness of the scar created in the image measured 6 months later. Oscar Thickness at Three Points in the Middle and a Centimeter of Wound Margin is Calculated by the Software.

Intervention groups

1

Description

Before The Intervention The Incision Site Both Groups Of Patients By 8-Megapixel Camera Iphone S6, Vertically And At A Distance Of 15 Cm Photographed. In The Experimental Group For 6 Days (24 Hours, 3, 5, 7, 9 And 11 Days After Cesarean Section) With The Mustang 2000 Is Made In Russia, To Continuously Irradiated With Gaalas Diode Laser With A Wavelength Of 830 Nm (Infrared) At A Rate Of 4 Joules Per Square Centimeter And 620 Nm Wavelength (Red) By 4 Joules Per Square Centimeter Are. 90 Degrees Angle Of The Probe On The Skin

Category

Treatment - Surgery

2

Description

Before The Intervention The Incision Site Both Groups Of Patients By 8-Megapixel Camera Iphone S6, Vertically And At A Distance Of 15 Cm Photographed. In The Intervention Group And Control Group In The Same Conditions Laser Probe Placed On The Skin But No Laser Is Emitted. Since The Effect Of Low Level Laser On And Increase Mitochondrial ATP And Its Regenerative Effects Remain 24 To 72 Hours So We Distance Between The Laser Radiation Chose The Other Day. Resident Women In The Intervention Group Performed By Laser Irradiation And Safety Issues Are Fully Respected.

Category

Treatment - Surgery

Recruitment centers

1

Recruitment center

Name of recruitment center

Hospital AmirAl-Momenin Semnan

Full name of responsible person

Dr Elham Saffarieh

Street address

Hospital AmirAl-Momenin Semnan

City

Semnan

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Semnan University of Medical Sciences

Full name of responsible person

Dr Elham Saffarieh

Street address

Hospital AmirAl-Momenin Semnan

City

Semnan

Grant name

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?

Yes

Title of funding source

Semnan University of Medical Sciences

Proportion provided by this source

100

Public or private sector

empty

Domestic or foreign origin

empty

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

empty

Person responsible for general inquiries

Contact

Name of organization / entity

Semnan University of Medical Sciences

Full name of responsible person

Dr Elham Saffarieh

Position

obstetricia et gynecologica

Other areas of specialty/work

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Person responsible for scientific inquiries

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Full name of responsible person

Dr Elham Saffarieh

Position

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Sharing plan

Deidentified Individual Participant Data Set (IPD)
empty
Study Protocol
empty
Statistical Analysis Plan
empty
Informed Consent Form
empty
Clinical Study Report
empty
Analytic Code
empty
Data Dictionary
empty