

Clinical Trial Protocol

Iranian Registry of Clinical Trials

17 Sep 2026

A Study on the Effect of Q10 Coenzyme via Tissue Doppler Method in Improving Cardiac Function in Patients with Early Duchenne Cardiomyopathy Aged 6-10 Years

Protocol summary

Summary

Purpose of the Study: The effectiveness of Q10 Coenzyme via Tissue Doppler method in improving cardiac function in patients with early Duchenne Cardiomyopathy aged 6-10 years. Inclusion criteria: The patients with Duchenne muscular dystrophy aged between 6 -10 years; parental consent to enter the study; without cardiac disease in the intervention group; without structural cardiac disease in the control group; untreated with herbal, vitamin and enzyme medications. Exclusion criteria: The patients without Duchenne muscular dystrophy; Patients age less than 6 years or above 10 years; parental lack of consent for entering the study; Patients with cardiac disease in the intervention group; Patients with structural cardiac disease in the control group; inappropriate echocardiography; Patients treated with of herbal s, vitamin and enzyme medications. Study population: Children 6-12 years old suffering Duchenne cardiomyopathy will refer to neurology clinic of Children's Medical Center. Sample size: Twenty four people; including 12 patients in the control group and 12 in the intervention group. Intervention: The effect of Q10 Coenzyme on improving cardiac function; cardiac marker tests, 3 and 6 months after intervention.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2015070223018N1**
Registration date: **2015-08-11, 1394/05/20**
Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2015-08-11, 1394/05/20

Registrant information

Name

Forod Salehi Abarghoei

Name of organization / entity

Tehran University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 915 893 6844

Email address

farhanghih@mums.ac.ir

Recruitment status

Recruitment complete

Funding source

Deputy of Research and Education at Tehran University of Medical Sciences

Expected recruitment start date

2012-04-20, 1391/02/01

Expected recruitment end date

2014-05-22, 1393/03/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

A Study on the Effect of Q10 Coenzyme via Tissue Doppler Method in Improving Cardiac Function in Patients with Early Duchenne Cardiomyopathy Aged 6-10 Years

Public title

Effect of Q10 Coenzyme in Improving Cardiac Function

Purpose

Treatment

Inclusion/Exclusion criteria
 Inclusion criteria: The patients with Duchenne muscular dystrophy aged between 6 -10 years; parental consent to enter the study; without cardiac disease in the intervention group; without structural cardiac disease in the control group; untreated with herbal, vitamin and enzyme medications. Exclusion criteria: The patients without Duchenne muscular dystrophy; Patients age less than 6 years or above 10 years; parental lack of consent for entering the study; Patients with cardiac disease in the intervention group; Patients with structural cardiac disease in the control group; inappropriate echocardiography; Patients treated with of herbal s, vitamin and enzyme medications.

Age
 From **6 years** old to **10 years** old

Gender
 Both

Phase
 2

Groups that have been masked
No information

Sample size
 Target sample size: **12**

Randomization (investigator's opinion)
 Randomized

Randomization description

Blinding (investigator's opinion)
 Not blinded

Blinding description

Placebo
 Used

Assignment
 Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Deputy of Research and Education at Tehran
 University of Medical Sciences

Street address

Central Department of the University, on the corner of
 Ghods street, Keshavarz boulevard

City

Tehran

Postal code

Approval date

2012-10-03, 1391/07/12

Ethics committee reference number

1512/13091/س

Health conditions studied

1

Description of health condition studied

Duchenne Moscular Dystrophy

ICD-10 code

G71.0

ICD-10 code description

Muscular dystrophy

Primary outcomes

1

Description

Left ventricular filling index

Timepoint

3 and 6 months after using the medication

Method of measurement

Tissue doppler

Secondary outcomes

1

Description

E Declaretion

Timepoint

3 and 6 months after using the medication

Method of measurement

Eco

Intervention groups

1

Description

Control group: A group of patients being treated with oral placebo on a daily basis for 6 months.

Category

Treatment - Drugs

2

Description

Intervention group: A group of patients being treated with oral Q10 Coenzyme (dose: 3 mg) on a daily basis for 6 months.

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Neurology Clinic of Children's Medical Center

Full name of responsible person

Hossain Jabbari

Street address

Digestive Diseases Research Institute □DDRI, □
Tehran University of Medical Sciences □TUMS,
□Tehran, Iran

City

Tehran

Sponsors / Funding sources**1****Sponsor****Name of organization / entity**

Deputy of Research and Education at Tehran
University of Medical Sciences

Full name of responsible person

Gholam Reza Hassan Pour

Street address

Amir Abad, Keshavarz boulevard

City

Tehran

Grant name**Grant code / Reference number****Is the source of funding the same sponsor organization/entity?**

Yes

Title of funding source

Deputy of Research and Education at Tehran 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**

Tehran University of Medical Sciences

Full name of responsible person

Dr Zenanloo

Position

Professor of Cardiologist

Other areas of specialty/work**Street address**

Amir Abad, Keshavarz boulevard

City

Tehran

Postal code**Phone**

+98 21 8898 9664

Fax**Email**

zenanloo@tums.ac.ir

Web page address**Person responsible for scientific inquiries****Contact****Name of organization / entity**

Tehran University of Medical Sciences

Full name of responsible person

Forod Salehi Abarghoee

Position

Cardiologist

Other areas of specialty/work**Street address**

Amir Abad, Keshavarz boulevard

City

Tehran

Postal code**Phone**

+98 21 8898 9664

Fax**Email**

hamidsalehi500@yahoo.com

Web page address**Person responsible for updating data****Contact****Name of organization / entity**

Tehran University of Medical Sciences

Full name of responsible person

Forod Salehi Abarghoee

Position**Other areas of specialty/work****Street address**

Amir Abad, Keshavarz boulevard

City

Tehran

Postal code**Phone**

+98 21 8898 9664

Fax**Email**

hamidsalehi500@yahoo.com

Web page address**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