Clinical Trial Protocol
Iranian Registry of Clinical Trials

08 Nov 2026

N-acetyl cysteine added to risperidone in the treatment of Autism: A double blind and placebo controlled trial

Protocol summary

Summary

The objective of this study is to assess the efficacy of N-acetyl cysteine in the treatment of autism. Forty children between the ages 3 and 12 years with a DSM IV clinical diagnosis of autistic disorder and who will be outpatients from a specialty clinic for children will be recruited. The children should present with a chief complaint of severely disruptive symptoms related to autistic disorder. Patients will be randomly allocated into N-acetyl cysteine (600-900 mg/day) + Risperidone (1-2mg/day) or Placebo + Risperidone (1-2mg/day) for a 10-week, double-blind, placebo-controlled study. Patients will be assessed at baseline and after 2, 4, 6, 8 and 10 weeks of starting medication. The primary outcome measure is the Aberrant Behavior Checklist-Community (ABC-C) Rating Scale (Irritibility subscale).

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201110281556N29**
Registration date: **2011-10-29, 1390/08/07**
Registration timing: **prospective**

Last update:
Update count: **0**

Registration date

2011-10-29, 1390/08/07

Registrant information

Name

Shahin Akhondzadeh

Name of organization / entity

Roozbeh Psychiatric Hospital, Tehran University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 21 5541 2222

Email address

s.akhond@sina.tums.ac.ir

Recruitment status

Recruitment complete

Funding source

Tehran University of Medical Sciences

Expected recruitment start date

2011-12-22, 1390/10/01

Expected recruitment end date

2013-11-01, 1392/08/10

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

N-acetyl cysteine added to risperidone in the treatment of Autism: A double blind and placebo controlled trial

Public title

N-acetyl cysteine in the treatment of autism

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion Criteria: 1-DSM IV clinical diagnosis of autistic disorder, 2-children between the ages of 3 and 12 years ,3- presence of behavioral problems such as aggression, overactivity or repetitive behaviors (indication of treatment with risperidone) Exclusion Criteria:1-Presence of any active medical problem, 2-any diagnosis in Axis I and II except for mental retardation, 3-history of allergy toN-acetyl cysteine,4- receiving any psychotropic medications during past two weeks prior to the trial, 5-presence of hepatic disease, 6-history of seizure

Age

From **3 years** old to **12 years** old

Gender
Both

Phase
2
Groups that have been masked
No information
Sample size
Target sample size: **40**
Randomization (investigator's opinion)
Randomized
Randomization description
Blinding (investigator's opinion)
Double blinded
Blinding description
Placebo
Used
Assignment
Parallel
Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Tehran University of Medical Sciences
Street address
Keshavarz Blvd
City
Tehran
Postal code
Approval date
2011-10-24, 1390/08/02
Ethics committee reference number
15155

Health conditions studied

1

Description of health condition studied
Childhood autism
ICD-10 code
F84.0
ICD-10 code description
Childhood autism

Primary outcomes

1

Description
Severity of Autism
Timepoint
Baseline and weerks 2, 4, 6, 8, 10
Method of measurement
Aberrant Behavior Checklist-Community (ABC-C) Rating Scale (Irritibility subscale)

Secondary outcomes

empty

Intervention groups

1

Description
Capsule N acetyl cysteine 600-900mg/day+ Tablet Risperidon 1-2 mg/day as intervention 10 for 10 weeks
Category
Treatment - Drugs

2

Description
Tablet Risperidone 1-2 mg/day +Capsule Placebo as control for 10 weeks
Category
Placebo

Recruitment centers

1

Recruitment center
Name of recruitment center
Roozbeh Hospital
Full name of responsible person
Dr. Mohhamad Reza Mohhamadi
Street address
south kargar street
City
Tehran

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Tehran University of Medical Sciences
Full name of responsible person
Dr. Akbar Fotouhi
Street address
Keshavarz Blvd
City
Tehran
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
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

Person responsible for scientific inquiries

Contact

Name of organization / entity

Tehran University of Medical Sciences

Full name of responsible person

Prof. Shahin Akhondzadeh

Position

Prof. of Clinical Psychopharmacology

Other areas of specialty/work

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Roozbeh Hospital-South Karegar street

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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