

Clinical Trial Protocol

Iranian Registry of Clinical Trials

08 Jul 2026

Comparison of the effectiveness of sertraline and Nortriptyline on anxiety and gastrointestinal symptoms in patients with irritable bowel syndrome: A double-blind clinical trial study

Protocol summary

Study aim

Comparison of the effectiveness of Sertraline and Nortriptyline on anxiety and gastrointestinal symptoms in patients with irritable bowel syndrome

Design

Clinical trial with control group, with parallel groups, double-blind, randomized, phase 3 on 192 patients. Blocking method will be used for randomization.

Settings and conduct

This study is performed in Valiasr Hospital and Bouali Birjand Clinic. 192 patients are randomly divided into three groups receiving sertraline, nortriptyline and antispasmodics. Patients' anxiety and clinical symptoms are assessed by the facilitator at the beginning and one month after the intervention.

Participants/Inclusion and exclusion criteria

patients referred to the subspecialty gastroenterology clinic of Bu Ali and Valiasr Hospital in 2021. Inclusion criteria: Patients between the age of 18 to 50 years and also the willingness of patients to participate and Exclusion criteria: Non-cooperation of the patient, history of gastrointestinal cancer and neurological disorders, pregnancy and lactation, bipolar or bipolar patients, contraindications to the use of both Sertraline and Nortriptyline, the use of antidepressants and anti-anxiety drugs, allergies to prescription drugs, concomitant serious physical illnesses such as heart disease, multiple sclerosis, psychosis Like schizophrenia and related disorders, it will be substance abuse and substance abuse.

Intervention groups

Intervention groups included patients receiving Sertraline 50 mg, Nortriptyline 25 mg (Abidi Pharmaceutical Company made in Iran) or antispasmodic drug (Maburin at a dose of 135 mg made by Alhavi Company in Iran) and symptomatic treatment of diarrhea or constipation for one month They receive it on a daily

basis.

Main outcome variables

Anxiety and clinical signs of patients include: bloating or abdominal distension, bowel movements such as diarrhea or constipation

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20190618043934N13**
Registration date: **2021-08-12, 1400/05/21**
Registration timing: **registered_while_recruiting**

Last update: **2021-08-12, 1400/05/21**

Update count: **0**

Registration date

2021-08-12, 1400/05/21

Registrant information

Name

Zabihullah Mohaghegh

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 56 3232 3232

Email address

oabstudent@gmail.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2021-08-06, 1400/05/15

Expected recruitment end date

2021-09-06, 1400/06/15

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of the effectiveness of sertraline and Nortriptyline on anxiety and gastrointestinal symptoms in patients with irritable bowel syndrome: A double-blind clinical trial study

Public title

Comparison of the effectiveness of sertraline and Nortriptyline on anxiety and gastrointestinal symptoms in patients with irritable bowel syndrome

Purpose

Treatment

Inclusion/Exclusion criteria**Inclusion criteria:**

Age 18 to 50 years Patient consent to participate in the study

Exclusion criteria:

Lack of patient cooperation to participate in further study
History of gastrointestinal cancer
History of neurological disorder
Pregnancy and lactation
Bipolar or bipolar patients
Contraindications to the use of two drugs sertraline and nortriptyline
Use of antidepressants and anti-anxiety drugs
Allergy to prescription drugs
Co-occurring with serious physical illnesses such as heart disease, multiple sclerosis
Having a psychotic illness such as schizophrenia and related disorders
Substance abuse and substance abuse

Age

From **18 years** old to **50 years** old

Gender

Both

Phase

3

Groups that have been masked

- Participant
- Outcome assessor

Sample size

Target sample size: **192**

Randomization (investigator's opinion)

Randomized

Randomization description

Participants in the study will be randomly divided into three intervention groups: sertraline (A), nortriptyline (B) or antispasmodic, and symptomatic treatment of diarrhea or constipation (C) using the blocking method. First, various triple blocks are created using sealed envelopes (ABC, ACB, BAC, BCA, CAB, CBA). One of these blocks is selected randomly and according to the order mentioned in the selected block, patients will be divided into one of three groups A, B or C. Then randomization is performed for other patients in the same way.

Blinding (investigator's opinion)

Double blinded

Blinding description

Outcome Evaluator: The study facilitator (medical student) will perform the necessary evaluation without knowing the type of medication received by the patients and will be recorded in a checklist designed for this purpose. Patients: The patients participating in the study are not aware of their group, so the drugs are packaged in the same package and given to patients by the pharmacy.

Placebo

Not used

Assignment

Parallel

Other design features**Secondary Ids**

empty

Ethics committees**1****Ethics committee****Name of ethics committee**

Ethics Committee of Birjand University of Medical Sciences

Street address

Vice Chancellor for Research and Technology, Birjand University of Medical Sciences, Ghaffari Blvd, Birjand Town

City

Birjand

Province

South Khorasan

Postal code

9717811674

Approval date

2021-07-12, 1400/04/21

Ethics committee reference number

IR.BUMS.REC.1400.117

Health conditions studied**1****Description of health condition studied**

irritable bowel syndrome

ICD-10 code

K58

ICD-10 code description

Irritable bowel syndrome

Primary outcomes**1****Description**

Anxiety

Timepoint

At the beginning of the study and one month after the start of the intervention in patients

Method of measurement

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: The first group in the interventional study are patients who are given sertraline 50 mg daily (Abidi Pharmaceutical Company made in Iran) for one month.

Category

Treatment - Drugs

2

Description

Intervention group: The second intervention group patients who are given nortriptyline 25 mg daily (Abidi Pharmaceutical Company made in Iran) for one month.

Category

Treatment - Drugs

3

Description

Control group: The third intervention group patients who are given antispasmodic medication daily (Moburin with a dose of 135 mg made by Alhawi Company of Iran) and symptomatic treatment of diarrhea or constipation for one month.

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Gastroenterology Clinic of Valiasr Hospital_Birjand

Full name of responsible person

Hossein Ehsani

Street address

Gastroenterology Clinic of Valiasr Hospital , Ghafari Blvd, Birjand Town

City

Birjand

Province

South Khorasan

Postal code

9717964151

Phone

+98 56 3261 2001

Fax

Email

valiasr@bums.ac.ir

2

Recruitment center

Name of recruitment center

Bu Ali Birjand Clinic_Birjand

Full name of responsible person

Hossein Ehsani

Street address

Bu Ali Birjand Clinic, Ghafari Blvd, Birjand Town

City

Birjand

Province

South Khorasan

Postal code

9717853577

Phone

+98 56 3239 5000

Email

public_r@bums.ac.ir

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Birjand University of Medical Sciences

Full name of responsible person

Dr. Tooba Kazemi

Street address

Vice Chancellor for Research and Technology, Birjand University of Medical Sciences, Ghaffari Blvd, Birjand Town

City

Birjand

Province

South Khorasan

Postal code

9717811674

Phone

+98 56 3238 1200

Email

research@bums.ac.i

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Birjand University of Medical Sciences

Proportion provided by this source

100

Public or private sector

Public

Domestic or foreign origin

Domestic

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

Academic

Person responsible for general inquiries

Contact

Name of organization / entity

Birjand University of Medical Sciences

Full name of responsible person

Zabihullah Mohaghegh

Position

Student

Latest degree

Bachelor

Other areas of specialty/work

General Practitioner

Street address

No.56, Jorjani Ave, Ghahhari Blvd, Birjand Town

City

Birjand

Province

South Khorasan

Postal code

9717934888

Phone

+98 56 3238 3232

Email

zabihullahmohaghegh@gmail.com

Person responsible for scientific inquiries

Contact

Name of organization / entity

Birjand University of Medical Sciences

Full name of responsible person

Dr. Tahmineh Tavakoli

Position

Associate Professor of Internal Medicine and Faculty Member

Latest degree

Medical doctor

Other areas of specialty/work

Internal Medicine

Street address

Department of Internal Medicine, School of Medicine, Birjand University of medical sciences, Ghahhari Blvd, Birjand Town

City

Birjand

Province

South Khorasan

Postal code

9717811674

Phone

+98 56 3238 3232

Email

oabstudent@gmail.com

Person responsible for updating data

Contact

Name of organization / entity

Birjand University of Medical Sciences

Full name of responsible person

Zabihullah Mohaghegh

Position

Student

Latest degree

Bachelor

Other areas of specialty/work

General Practitioner

Street address

No.56, Jorjani Ave, Ghaffari Blvd, Birjand Town

City

Birjand

Province

South Khorasan

Postal code

9717934888

Phone

+98 56 3238 3232

Email

zabihullahmohaghegh@gmail.com

Web page address

Sharing plan

Deidentified Individual Participant Data Set (IPD)

Undecided - It is not yet known if there will be a plan to make this available

Study Protocol

Undecided - It is not yet known if there will be a plan to make this available

Statistical Analysis Plan

Undecided - It is not yet known if there will be a plan to make this available

Informed Consent Form

Undecided - It is not yet known if there will be a plan to make this available

Clinical Study Report

Undecided - It is not yet known if there will be a plan to make this available

Analytic Code

Undecided - It is not yet known if there will be a plan to make this available

Data Dictionary

Undecided - It is not yet known if there will be a plan to make this available