Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

comparison the effects of chest physiotherapy and breathing exercises on fatigue and daily activities in patients with Chronic Obstructive Pulmonary Disease.

Protocol summary

Summary

This is a randomized clinical trial study to determine and comparison the effects of chest physiotherapy and breathing exercises on fatigue and daily activities in patients with Chronic obstructive Pulmonary Disease(COPD). fifty one patients with COPD will be divided randomly in three groups of chest physiotherapy (group 1) , breathing exercises (group2), chest physiotherapy and breathing exercises (group 3). Inclusion criteria are: filled in patients consent, definite diagnosis of COPD, aged 40-65, lack of diagnosed mental disorders, no other chronic and disabling disease like heart failure and lung cancer which have Confounding effects on the study. Exclusion criteria are: no more tendency to continue the study, disability to do recommended chest physiotherapy and breathing exercises, exacerbations during hospitalization, emigration and death. Population of the study is all COPD patients who have been admitted at internal wards of hospitals in Yasuj. Total sample size is 51 patients who will be divided in 3 groups (each group 17 patients). Interventions for group 1: chest physiotherapy 3 times a day for 10 days, group 2: breathing exercises 3 times a day for 10 days, and group 3: both interventions (chest physiotherapy and breathing exercises) 3 times a day for 10 days. Data will be collected before interventions, 1 and 2 weeks after interventions. Primary outcomes are fatigue and daily activities of COPD patients.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2015082923804N1**
Registration date: **2015-12-30, 1394/10/09**
Registration timing: **registered_while_recruiting**
Last update:
Update count: **0**

Registration date

2015-12-30, 1394/10/09

Registrant information

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Name of organization / entity
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Recruitment status

Recruitment complete

Funding source

Vice Chancellor for research of Yasuj University of Medical Science

Expected recruitment start date

2015-10-23, 1394/08/01

Expected recruitment end date

2016-02-20, 1394/12/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

comparison the effects of chest physiotherapy and breathing exercises on fatigue and daily activities in patients with Chronic Obstructive Pulmonary Disease.

Public title

Effect of pulmonary rehabilitation on fatigue and daily activities of patients with Chronic Obstructive Pulmonary Disease.

Purpose

Supportive

Inclusion/Exclusion criteria

Inclusion criteria are: filled in patients consent , definite diagnosis of Chronic Obstructive Pulmonary Disease , aged 40-65, lack of diagnosed mental disorders, no other chronic and disabling disease like heart failure and lung cancer which have Confounding effects on the study. Exclusion criteria are: no more tendency to continue the study, disability to do recommended chest physiotherapy and breathing exercises, exacerbations during hospitalization, emigration and death.

Age

From **40 years** old to **65 years** old

Gender

Both

Phase

2-3

Groups that have been masked

No information

Sample size

Target sample size: **51**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Not blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

Fifty-one patients with Chronic Obstructive Pulmonary Disease will be randomly divided into three groups. (simple random).

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee of Yasuj University of Medical Sciences

Street address

Research Management of Yasuj University of Medical Sciences, Research and Technology Deputy of Yasuj University of Medical Sciences, Shahid Motahary Blvd., Yasuj, Iran

City

Yasuj

Postal code

7591994799

Approval date

2015-08-26, 1394/06/04

Ethics committee reference number

Code of ethics: YUMS.REC.1394.76

Health conditions studied

1

Description of health condition studied

Chronic Obstructive Pulmonary Disease

ICD-10 code

J95-J99

ICD-10 code description

other disease of the respiratory system

Primary outcomes

1

Description

fatigue

Timepoint

Before intervention, A week after intervention, Two week after intervention.

Method of measurement

MFI-20 Questionnaire

2

Description

Activities of Daily Living

Timepoint

Before intervention, A week after intervention, Two week after intervention.

Method of measurement

ADL- QUESTIONNARE

Secondary outcomes

1

Description

havenot

Timepoint

havenot

Method of measurement

havenot

Intervention groups

1

Description

Intervention1: In chest physiotherapy group interventions will be done by nurse and 3 times a day for 10 minutes while last for 10 days from admission. Patients will be in different positions and will be tapped with cup-shaped hand and palmar vibration. It will be done in patient's room and on his/her bed.

Category

Rehabilitation

2

Description
Intervention2: In breathing exercise group interventions (pursed lip and diaphragmatic respiration, inflating balloon or plastic bag) will be done 3 times a day for 15 minutes while last for 10 days from admission.
Category
Rehabilitation

3

Description
Intervention3: in group 3 all interventions in groups 1 and 2 will be done for patients 3 times a day for 10 days from admission.
Category
Rehabilitation

Recruitment centers

1

Recruitment center
Name of recruitment center
Emam Sajad Hospital
Full name of responsible person
Dr Ardashir Afrasiabifar
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Nursing and Midwifery College, Shahid Dr. Jalil St., Yasuj
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2

Recruitment center
Name of recruitment center
Beheshti Hospital
Full name of responsible person
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Vice chancellor for research,Yasuj University of Medical Sciences
Full name of responsible person
Doctor Mehdi Akbartabar turi
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Research Management of Yasuj University of Medical Sciences, Research and Technology Deputy of Yasuj University of Medical Sciences, Shahid Motahary Blvd., Yasuj, Iran
City
Yusuj
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Vice chancellor for research,Yasuj 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

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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