Peppermint oil for the treatment of Irritable Bowel Syndrome

No registrations found.

Ethical review	Positive opinion
Status	Pending
Health condition type	-
Study type	Interventional

Summary

ID

NL-OMON21220

Source
Nationaal Trial Register

Brief title
PERSUADE

Health condition

Irritable Bowel Syndrome
Abdominal Pain

Sponsors and support

Primary sponsor: Maastricht University Medical Center
Source(s) of monetary or material Support: ZonMw

Intervention

Outcome measures

Primary outcome

As per FDA recommendation;

1. Abdominal pain response rate after 8 weeks of treatment.

a. A responder is defined as a patient who experiences at least a 30 percent decrease in the weekly average of worst daily abdominal pain (measured daily, on an 11 point NRS) compared to baseline weekly average in at least 50 percent of the weeks in which the treatment in given.

As per EMA recommendation;

2. Degree of relief response rate after 8 weeks of treatment.

a. A responder is defined as a patient who experiences a weekly relief of 1 or 2 (on a 7 point NRS) in at least 50 percent of the weeks in which treatment is given.

Secondary outcome

Global symptom improvement [Time Frame: 8 weeks]

As determined by IBS-SSS (IBS symptom severity scale)

Abdominal Discomfort [Time Frame: 8 weeks]

As determined by symptom diary

Bloating [Time Frame: 8 weeks]

As determined by IBS-SSS (IBS - symptom severity scale)

Regurgitation [Time Frame: 8 weeks]

As determined by symptom diary

Nausea [Time Frame: 8 weeks]

As determined by symptom diary

Urgency [Time Frame: 8 weeks]

As determined by symptom diary

Abdominal cramps [Time Frame: 8 weeks]
As determined by symptom diary

Average stool frequency and consistency [Time Frame: 8 weeks]

Measured by bristol stool chart

Indirect costs [Time Frame: 8 weeks, 3 and 6 months]

Determined by Production Cost Questionnaire (PCQ) questionnaire

Direct costs [Time Frame: 8 weeks, 3 and 6 months]

Determined by Medical Cost Questionnaire (MCQ) questionnaire

General Quality of Life [Time Frame: 8 weeks, 3 and 6 months]

As determined by Euro-Qol-5D (EQ-5D)

IBS related Quality of Life [Time Frame: 8 weeks, 3 and 6 months]

As determined by IBS-Quality of life questionnaire (IBS-QoL)

Use of Over the counter medication and rescue medication [Time Frame: 8 weeks]

Number of drugs taken as rescue medication (This is not an intervention)

Number and severity of side effects [Time Frame: 8 weeks]

Determined by daily diary

Responder rates following discontinuation of treatment at 3 and 6 months, different thresholds for the responder analysis of abdominal pain (e.g. 40 and 50 percent improvement); [Time Frame: 3 and 6 months after discontinuation of treatment]
Responder rates when missing are interpreted as "no effect" [Time Frame: 8 weeks]

Study description

Background summary

Background of the study:
Peppermint oil has shown to be effective in the treatment of IBS symptoms in several meta-analyses. However, the level of evidence is moderate and peppermint oil remains relatively under-used in IBS. Therefore, we plan to conduct a multicenter randomized controlled trial to investigate the effects of an eight-week peppermint oil treatment in IBS patients according to current EMA/FDA guidelines. To improve efficacy and to reduce side effects, we aim to study the use of a new peppermint oil formulation, a colon-targeted-delivery capsule that will release the oil in the (ileo-) colonic region specifically.

Study design:

a randomized, double blind, placebo-controlled clinical trial with three parallel study arms.

Study population:

178 patients with Irritable Bowel Syndrome, 18 - 75 years old.

Intervention:

group A will receive 8 weeks of daily treatment with enteric-coated peppermint oil capsules(TempocolOO), group B will receive 8 weeks of daily treatment with colon-targeted-delivery peppermint oil capsules(Tempocol-ColoPulseOO), group C will receive 8 weeks of daily treatment with placebo capsules.

Primarystudy parameters/outcomeofthestudy:

1. Abdominal pain response rate after 8 weeks of treatment.

a. A responder is defined as a patient who experiences at least a 30 percent decrease in the weekly average of worst daily abdominalpain(measureddaily,onan11 pointNRS)comparedtobaselineweeklyaverageinatleast50percentofthe weeks in which the treatment in given.

2. Degree of relief response rate after 8 weeks of treatment.
a.Aresponderisdefinedasapatientwhoexperiencesaweeklyreliefof1 or2(ona7pointNRS)inatleast50percentof the weeks in which treatment is given.

Secundary study parameters/outcome of the study (if applicable):

Global symptom improvement, abdominal discomfort, bloating, regurgitation, nausea, urgency, abdominal cramps(as determined bysymptom diaryand IrritableBowelSyndromeSymptom SeverityScale(IBS-SSS),averagestoolfrequency and consistency(measured by the Bristol Stool Form Scale)at baseline and aftertreatment(number ofcomplete spontaneous bowel movements(CSBMs)for IBS-C, more lumpy stools in case of IBS-D), cost-utility(as determined by calculationswith EQ-5D,directcosts MCP,indirectcostsPCQ and socialtariff,qualityoflife(asdetermined bythe EQ-5D and IBS-QoL), use of OTC and rescue medication, number and severity of side effects, responder rates following discontinuation oftreatmentat4and6 months,differentthresholdsfortheresponderanalysisofabdominal pain(e.g.40 and 50 percent improvement). Worst-case-analysis: imputing anon-response day for each day on which the electronic diary entry was missing(due to non-reporting ofthe patient).

Nature and extent of the burden and risks associated with participation, benefit and group relatedness (if applicable):

Subjects may be confronted with certain inconveniences and minor risks. Study participants have to visit the hospital 4 times, including the first visit in which eligible subjects will be screened before participation. The screening will take up to 1 hour and will consist of a simple questionnaire, a general physical exam performed by the physician-investigator and a standard pregnancytest(in women offertileage,<55yearonly).Ifdeemed suitable bytheinvestigator,subjectswillenter the run-in period. During this period, patients are asked to report their daily stool and symptom scores to an electronic diary. If after the run-in period, patients meet the in- and exclusion criteria, they will enter the treatment period. If randomized to peppermint oil treatment,the subject may feel reliefof IBS symptoms. Ifrandomized to placebo,the subject may experience minor burden due to not receiving treatment(although dietary and lifestyle advice continue). Side effects of peppermint oil include heartburn, esophageal reflux, a burning anal sensation and a headache. During the treatment period, daily symptom and stool scores have to be reported. Moreover, several questionnaires have to be competed at several time-points, taking several hours in total.

Study objective

We hypothesize that treatment with peppermint oil will lead to a greater symptom (especially abdominal pain) reduction in IBS patients compared to placebo. This will lead to a higher total percentage of responders (as defined by FDA/EMA recommendations) in the peppermint oil arm, compared to placebo.

Study design

Subjects are requested to fill in the symptom diary everyday.

Other time point include:

T= 0, baseline

T= 2 weeks

T= 4 weeks

T= 6 weeks

T= 8 weeks

T= 3 months after intervention ended

T= 6 months after intervention ended

Intervention

Arm 1: enteric-coated Peppermint Oil capsules

Arm 2: colon-targeted-delivery Peppermint Oil capsules

Arm 3: Placebo

Contacts

Public
-
- Persuade
Maastricht
The Netherlands
-
Scientific
-
- Persuade
Maastricht
The Netherlands
-

Eligibility criteria

Inclusion criteria

1. Age between 18 and 75 years;

2. Diagnosed with Irritable Bowel Syndrome according to the Rome III criteria:

• Recurrent abdominal pain or discomfort, at least 3 days/month for the last 3 months;

• Symptom onset at least 6 months prior to diagnosis

• Associated with two or more of the following:

1. Improvement with defecation;

2. Onset associated with a change in frequency of stool;

3. Onset associated with a change in form (appearance/consistency) of stool;

3. Based on the medical history and previous examination, no other causes for the abdominal complaints can be defined. Especially no history of:

a. Inflammatory Bowel Disease;

b. Celiac Disease;

c. Thyroid dysfunction (if not well-regulated);

If alarm symptoms (including unexplained rectal blood loss or weight loss) are present, a colonoscopy has been performed and was negative for other causes.

4. Women in fertile age (<55 years old) must use contraception or be postmenopausal for at least two years.

5. Average worst abdominal pain score (on 11-point NRS) of > 3, during the two-week run-in period.

Exclusion criteria

1. Insufficient fluency of the Dutch language;

2. Any previous use (also incidental use) of peppermint oil capsules in the last 3 months prior to inclusion;

3. The inability to stop regular use of medication affecting the gastro-intestinal system (such as Non Steroidal Anti Inflammatory Drugs (NSAID), laxatives, prokinetics, opioids, smasmolytics and anti-diarrhoeal drugs);

a. The use of 1 antidepressant drug is allowed, providing dosing has been stable for > 6 weeks before enrollment; b. The use of 1 proton pump inhibitors (PPI) is allowed, providing

dosing has been stable > 6 weeks before enrollment;

4. Previous major abdominal surgery or radiotherapy interfering with gastrointestinal function:

a. Uncomplicated appendectomy, cholecystectomy and hysterectomy allowed unless within the past 6 months;

b. Other surgery upon judgment of the principle investigator;

5. History of liver disease, cholangitis, achlorhydria, gallstones or other diseases of the gallbladder/biliary system;
6. Pregnancy, lactation;

7. Using drugs of abuse;

8. Known allergic reaction to peppermint.

Study design

Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Double blinded (masking used)
Control:	Placebo

Recruitment

NL

Recruitment status:	Pending
Start date (anticipated):	30-05-2016
Enrollment:	180
Type:	Anticipated

IPD sharing statement

Plan to share IPD: Undecided

Ethics review

Positive opinion

Date:	03-05-2016
Application type:	First submission

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
NTR-new	NL5490
NTR-old	NTR5812
Other	EudraCT2015-005467-16 : NCT02716285

Study results